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COUNTRY PRACTICES IN THE COLLECTION AND COMPILATION OF PRICE STATISTICS IN THE AFRICAN REGION

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I. Introduction

1. This paper is intended to describe briefly the methods and practices used by African countries in collecting and compiling price statistics and calculating the related index numbers. A summary of the detailed country practices is given in the annexes, in whichsome basic characteristics of index numbers of prices are given in by sub-region and country. The basic characteristics tabulated are: official title of the index, scope and coverage of the index, frequency of calculation, sources of data and number of establishments supplying the data, method of price collection, base year, revision of weights, number of items or commodities, formulae used, type of weights used and any other information such as frequency of price collection, treatment of seasonal fluctuations in item prices, etc.

2. The paper starts with a general review of available data on index numbers in the region as revealed by the results of the questionnaire sent out by the Economic Commission for Africa for completion by the countries. This is followed by a description of the national practices in the collection of price data and compilation of index numbers in various fields under the headings: producer, wholesale and consumer or retail prices.

3. The materials used in preparing the paper have mainly been obtained from the country replies to the ECA questionnaire mentioned above; from publications of some countries on price statistics and index numbers available in the ECA library, other national materials, methodological descriptions and notes in the publications of the United Nations and its agencies. 1/

4. As in all postal enquiries of this type, the responses in the questionnaire returns varied in both quality and coverage from country to country. At the end of the paper are annexes giving detailed information on index numbers. Annex I gives available information relating to indexes at: (a) producer prices; (b) wholesale prices; and (c) retail prices. Annex II gives: (a) the industry groups, number of series and weighting coefficients for indices of production; (b) groups and sub-groups of items, number of items and percentage weights for indices of wholesale prices, and (c) groups, number of items and weights for consumer price indices, Annex III shows the categories of staff in the National Statistical Offices dealing with price statistics. The information given relates only to those countries that responded to the ECA questionnaire.

II. General Aspects of the Enquiry

5. Out of a total of 49 countries (to which the enquiry was directed) only 26 countries responded and all these returns showed that the respective countries compile at least one index number, meaning that there were no "nil" returns.

1/ United Nations Statistical Yearbooks; United Nations Monthly Bulletin of Statistics; Supplement to the Statistical Yearbook and the Bulletin of Statistics - Methodology and Definitions; the Technical Guide - Consumer Prices Vol. 1 - Descriptions of series published in the Bulletin of Labour Statistics, International Labour Office.

Table 1 below summarises the responses to the questionnaire. A copy of the questionnaire is being circulated to the seminar as Annex IV to this paper.

Table 1 Responses to the questionnaire

	North Africa	West Africa	Central Africa	East Africa	Total
Number of countries that replied	4	4	5	13	26
Number of countries that have not replied	2	12	6	3	23
Total	6	16	11	16	49

6. The questionnaire requested for basic information on data collection and compilation as enumerated under paragraph 1 above. It also asked for methods used by the various countries what procedures they follow in pricing seasonal items, criterion they use in selecting a commodity, descriptions they use in defining a product, procedures they follow when items of a given quality cease to be produced or are no longer available in the market, etc. These aspects of the questionnaire are dealt with in greater detail in subsequent sections of this paper. As mentioned earlier, the replies received varied in quality and degree of completeness, this depending on the experience the specific country has had in collecting and compiling data on price statistics. Nevertheless, the returns gave an up-to-date information on the country's achievements on price statistics. In the case of those countries that did not respond to the enquiry, the secretariat relied mainly on the information available in the publications listed in paragraph 3, but in most cases could not supply up-to-date information or give answers to all the questions of the questionnaire.

7. Generally, the countries of the region are making some effort in expanding their price statistics to cover many areas. This is revealed by table 2. All in all, 11 countries compile indexes of production covering agriculture, industries and construction sector; 12 countries compile wholesale price indexes and 43 compile retail or consumer price indexes.

8. Also the table shows that most of the countries that compile indexes of production cover the three main industrial divisions of mining, manufacturing and electricity and gas, and out of these a general index is built. The countries that cover these divisions are Egypt, Morocco, Ghana, Nigeria, Senegal 1/ and Zambia. The rest of the countries have other combinations. Out of these, two (Algeria and Cameroon) as revealed by the enquiry, calculate indexes of agricultural production. Egypt could be included under this category but her index has not been officially published. Only one country, Kenya, indicated to be compiling the construction cost index, and another, Uganda, compiles an index on manufacturing.

1/ The index on manufacturing is obtained as a residual from the general index. This is done by the United Nations Statistical Office by subtracting mining and electricity.

Table 2.

Summary of Index Numbers Compiled

Sub-Region and Country	Response to ECA Questionnaire	Indexes of Production					Wholesale Price Indexes				Retail or Consumer Price Indexes						
								Specific Index			National Coverage			Urban Coverage			
		Agriculture	Mining	Manufacturing	Electricity and Gas	Other	General	Exports	Imports	Other	Low Income Group	Middle Income Group	High Income Group	Africans: Low Income Group	Africans: Middle Income Group	Africans: High Income Group	Expatriates
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
North Africa																	
Algeria		X	X		X									X			
Egypt	X		X	X	X		X				X	X	X				
Libya				X										X			
Morocco	X		X	X	X		X								X		
Sudan	X						X							X		X	X
Tunisia	X						X				X						
West Africa																	
Benin																	
Cape Verde														X[e]			
Gambia	X													X			
Ghana			X	X	X		X				X	X	X				
Guinea														X			X
Guinea Bissau										X[c]				X			
Ivory Coast														X			
Liberia														X			X
Mali	X																X
Mauritania														X[e]			X
Niger	X																
Nigeria			X	X	X						X			X			X
Senegal			X	X[b]	X					X[c]				X			
Sierra Leone														X			
Togo	X													X[e]			X
Upper Volta														X			
Central Africa																	
Angola															X		
Burundi	X													X[e]			
Cameroon	X	X		X											X		X
Central African Empire							X										X
Chad	X															X	
Congo	X													X[e]			X
Equatorial Guinea																	
Gabon							X							X			X
Rwanda	X						X							X			
Sao Tome																	
Zaire														X			
East Africa																	
Botswana	X										X	X	X				
Djibouti	X																X
Ethiopia	X							X		X				X			
Kenya	X		X	X		X[b]								X	X	X	
Lesotho	X										X	X	X				
Madagascar	X													X	X	X	X
Malawi	X													X		X	
Mauritius	X										X[d]						
Mozambique														X[e]			
Seychelles	X													X[e]			
Somalia														X			
Swaziland	X													X			
Tanzania	X										X			X	X	X	
Uganda	X			X										X	X	X	
Zambia	X		X	X	X		X			X[c]				X		X	
Total	26	2	8	10	6	1	9	1	1	3	8	4	4	29	8	8	13

a/ Compiled by the Statistical Office of the United Nations
b/ Construction cost index
c/ Indexes of building materials
d/ All families covered in the island except for the district of Rodriques
e/ Population groups covered not specified

9. Columns 7 through 10 of the table show that out of a total of 12 countries compiling indexes of wholesale prices, 5 of them calculate the general index covering agricultural and industrial commodities. Ethiopia calculates specific indexes of import and export commodities. Ivory Coast, Senegal and Zambia construct indexes of building materials.

10. Almost all African countries compile the cost of living or consumer price index. At the time of writing this paper only 5 countries - Benin, Guinea, Guinea Bissau, Equitorial Guinea, Sao Tome and Principe has not indicated whether they calculate this type of index or not. Our other sources of information did not contain any data on these countries. The geographical coverages of the indexes are either national, i.e. covering the whole country or a few selected areas of the country (urban and rural) to represent the country as a whole; or centred around a few urban areas or just the capital city/town. The population groups covered also varied from country to country as shown by table 2.

(a) Columns 11 through 13 show the 8 countries that calculate a national index. Out of these, 4 (Egypt, Ghana, Botswana and Lesotho) cover the three population groups - low, middle and high income groups. Mauritius covers about 95 per cent of the island's population, i.e. all families expecting for the island district of Rodrigues.

(b) Columns 14 through 17 show that 37 countries calculate an index covering the urban centres only, embracing either or both the African and the expatriate populations. Kenya, Madagascar, Tanzania and Uganda cover the three population groups and the rest have different combinations. Column 14 for the indexes of low income group includes these countries which did not indicate the population group covered. These countries are Cape Verde, Niger, Togo, Burundi, Congo, Seychelles and Mozambique.

11. New developments have taken place in countries of the region regarding the establishment of integrated systems of price data in different areas. These features will be considered separately under the three 3 main headings of the questionnaire - producer prices, wholesale prices and consumer prices.

12. The questionnaire had also enquired into the organization and staffing of the unit(s) of the national statistical offices dealing with price statistics. The responses to this question varied from country to country especially with regards to the qualifications of staff and the designations of their positions (posts). These responses have been tabulated into the 4 main categories - professionals, sub-professionals with diploma training, sub-professionals with certificate level training and sub-professionals without any formal training. Refer to Annex III for the details. It will be noted that some countries supplied the number of enumerators collecting data without the number of other grades compiling and analysing data and vice versa.

III. Indexes of Production

13. The statistics available on production for the African countries have largely been confined to goods producing industries, mainly mining and manufacturing and also electricity production with very little in construction and agriculture. (Refer to Table 2, columns 2 through 6). It is interesting to note that eventhough a large number of the African countries have conducted surveys on agriculture, only two countries indicated to be engaged in compiling an index of agricultural production. As mentioned under paragraph 9, Egypt compiles this index but this information has not been officially released.

14. National practices in relation to the collection of data and calculation of indexes of production are discussed below:

A. Scope and coverage

15. Of the eleven countries that compile indexes of production ten compile them on a national level. Only Uganda covers the industries in Kampala, the capital city. Generally, industries engaged in mining, manufacturing and energy compose the bulk on which the indexes were calculated, and due to the limited number of establishments in mining, electricity and gas in almost all the African countries, the coverage is usually complete. However, in mining, some countries like Algeria exclude the extraction of crude petroleum and natural gas. Morocco and Ghana exclude stone quarrying, clay and sand pits. Ghana again excludes the production of small diamond diggers. In the case of industries in manufacturing, the coverage is often limited to establishments of a certain size.

16. The following limitations in the coverage of the manufacturing industry were reported, the main criterion used being that of size of establishment i.e. number of persons employed, as shown below:

- Complete coverage (in principle) - Egypt
- Establishments employing 10 or more persons: Morocco and Uganda.
- Establishments employing 20 or more persons: Libya.
- Establishments employing 30 or more persons: Ghana.
- Manufacturing output of all items with an annual gross output of K£ 1/2 million: Kenya.
- Establishments which account for 80 percent or more of the total net output in 1969 and 1973. The net output is defined as the contribution to GDP in basic values: Zambia.

17. The constituents of the composite index of construction costs, compiled by only one country, Kenya, are cost indices on residential and non-residential buildings and on civil engineering work whose weights are 25.7, 22.4 and 51.9 respectively. The weights of these works were derived from the results of the 1971 survey on industrial production. The coverage for non-residential buildings excludes more specialised structures like hospitals, factories and warehouses.

B. Selection and definition of commodity

18. The criterion followed in selecting a commodity for inclusion in the index hinges on a number of considerations by the various countries. A few examples will be cited below:

- Morocco: consideration is based on the importance of the product in the market and to the economy as a whole, the choice depending on the degree of processing of the product.
- Cameroon and Uganda: consideration is on the overall turnover of the product and also its importance in the consumption pattern.
- Kenya: consideration is mainly on the function of the item.
- Zambia: consideration is on the commodity's importance in the contribution to GDP within the division.

19. Generally, the countries define a product by using all characteristics possible so as to try and identify the particular product for pricing. The characteristics used are weight, size, volume, brand or trade name, number, etc.

C. Frequency of Compilation

20. Out of the eleven countries that compile indices of production, only one (Zambia) compiles them on a monthly basis, another two (Cameroon and Uganda) on a quarterly basis; two (Libya and Egypt) annually; one (Kenya) both monthly and annually; three (Algeria, Nigeria and Senegal) both quarterly and annually and only one (Ghana) monthly, quarterly and annually.

D. Weighting system

21. Basically, two types of weights are used by the eleven countries in working out their indexes of production: (a) weights derived from gross value of production or gross output and (b) weights based on value of net output or value added. Refer to Annex I.A. under producer prices to get each country's detailed description of the type of weights employed. Below are the countries that use the two types of weights:

Gross value of production: Algeria, Cameroon, Ghana, Morocco.

Value added: Egypt, Kenya, Libya, Nigeria, Senegal, Uganda and Zambia.

E. Method of Calculation

22. The indexes for all the countries are calculated as base-weighted arithmetic averages starting from series of relatives of indicators of output. These relatives are combined into indexes for industry groups, then into indexes for major groups of industry and finally into indexes for total mining, total manufacturing and total electricity. Adjustments are made at all levels of index calculation. For instance, Kenya's indexes are seasonably adjusted at group, major group and division levels. Algeria's indexes are adjusted for differences in the number of working days per quarter but not for seasonal variations.

IV Wholesale prices and wholesale price indexes

23. With reference to table 2 above, about twelve countries compile indexes of wholesale prices, namely Egypt, Morocco, Sudan, Tunisia, Ghana, Ivory Coast, Senegal, Central African Empire, Gabon, Rwanda, Ethiopia and Zambia. It may be recalled that an analytical breakdown of the various indexes compiled by the said countries is given in paragraph 10. Country practices in the collection of data and the calculation of these index numbers are discussed below:

A. Scope and Coverage

24. The coverage of the indexes compiled can be limited to two main categories: (a) indexes whose geographical coverage is the capital city with countries like Central African Empire, Gabon, Rwanda, Ivory Coast, Ethiopia and Senegal falling under this category, and (b) indexes whose geographical coverage is national with countries like Egypt, Ghana, Sudan, Tunisia and Zambia under this group. Morocco could be classified under the last group but its coverage is restricted only to nine big cities.

B. Selection and Definition of a Commodity

25. In most countries, items are included as index items because of their importance in the consumption pattern, because of their ease of observation and availability in the market. Zambia included all items for observation which had a weight of at least 0,1 per cent in the base year. Specifications of commodities for pricing are usually made in terms of physical characteristics such as quality, weight, size, trade mark, model, material, brand, etc. Basically, the prices of imported commodities are cif and of exported commodities fob. They also include indirect taxes and other charges.

C. Treatment of seasonality and disappearing items

26. Different countries follow different methods so as to make room for the inclusion of seasonal items in the index. For instance, Tunisia calculates a special index for the agricultural products called the "sensitive index of wholesale prices". Morocco uses a "seasonal coefficient" to adjust the general index. Egypt excludes the items at the beginning and end of the season and distributes their weights among the remaining items in the group. No seasonal adjustments are made by the rest of the countries in the section.

27. Regarding those items that disappear from the market, the general procedure followed by most countries is that of substitution i.e. substituting the item with one that satisfies the same need or has similar characteristics. An alternative to the latter procedure is to maintain the last price of the item for a period until it reappears and if it does not appear after this period, its weights are distributed among other items within the group.

28. The tables that follows shows the different frequencies of compilation of the index by the various countries

D. Frequency of Compilation

28. The table that follows shows the different frequencies of compilation of the index by the various countries.

Bi-monthly	Monthly	Quarterly	Annually
Gabon	Central African Empire	Ethiopia	Rwanda
	Egypt	Sudan	
	Ghana	Zambia	
	Ivory Coast		
	Morocco		
	Senegal		
	Tunisia		

E. Formulae used

29. The Laspeyres formula - base weighted arithmetic averages of price relatives has been used by most countries, excepting for Rwanda which does not calculate a weighted index but an elementary one by simple arithmetic averages.

F. Classifications used

30. Generally, two approaches have been used by the countries and these are the sector approach and the commodity approach. The latter is more commonly used by the countries than the former. The various country practices will be cited below:

- Egypt classifies the index according to the standard Arab Classification of Economic Activities (S.A.C.E.A.) and further classifies it according to end use and stage of processing, the approach is basically a commodity approach;
- Zambia uses the sector approach and further regroups the items into domestically used goods and exported goods;
- The rest (Central African Empire, Ethiopia, Gabon, Ghana, Ivory Coast Morocco, Senegal, Sudan and Tunisia) use the commodity approach and generally distinguish between domestic goods and imported goods.

G. Weighting system

31. The types of weights used by the countries are mainly based on the supply of goods for local consumption or on the value of domestic production and imported goods; some countries include exports and others exclude them. A few examples will be cited below. Please refer to annex I-B for more details on the types of weights used by each country.

- Egypt: Value of domestic and imported goods in base year.
- Gabon: Value of wholesale transactions excluding exports.
- Ghana: Based on value of commodity supply for domestic consumption and export purposes.
- Senegal: Based on declarations by business outlets who trade at wholesale and private contractors on value and quantity of imports.
- Zambia: Total value of domestic production marketed in 1966 and sales of building materials.

V. Retail Prices and Consumer Price Indexes

32. Referring to Table 2 under section II. about forty-three countries compile consumer price indexes on a regular basis, either for the African population or the European population or both; covering either the capital city only, several cities/towns or the whole country (both rural and urban); calculating only for one or two or all income groups (low, middle and high income groups).

33. Country practices in the collection of data on retail prices and the calculation of consumer price indexes will be summarised below:

A. Scope and Coverage

34. Geographically, the scope of consumer price indexes compiled by the African countries may belong to one of the two main categories: (i) indexes of national coverage and (ii) indexes covering the urban areas only. The latter could still be divided into indexes for selected urban areas and indexes for the capital city/town only.

The table below illustrates the type of coverage mentioned

National coverage	Coverage of selected urban centres and their number	Coverage of capital city/town
Egypt, Tunisia, Ghana, Nigeria, Mauritius, Botswana, Lesotho Tanzania	Morocco (8), Gambia (3), Malawi (2), Swaziland (2), Zambia (10)	The remaining 29 countries (i.e. Algeria, Libya, Sudan Cape Verde, Ivory Coast, Liberia, Mali, Mauritania, Niger, Senegal, Sierra Leone, Togo, Upper Volta, Angola, Burundi, Cameroon, Central African Empire, Chad, Congo, Gabon, Rwanda, Zaire, Djibouti, Ethiopia, Kenya, Madagascar, Mozambique. Seychelles, Somalia and Uganda.

35. Regarding the population groups covered by the indexes, three main groups were identified as shown under table 2 above.

(i) the indexes covering the African population and sub-divided into low, middle and high income groups. (In some cases the high income group covers the expatriate population, especially in towns/cities.)

(ii) indexes relating to nationals and expatriates separately in selected towns.

(iii) indexes relating to expatriates only.

The table below shows the countries covering the various population groups.

Indexes for African population	Indexes for both African and expatriate population	Indexes for Expatriates only.
Algeria, Egypt, Libya, Morocco, Tunisia, Cape Verde, Gambia, Ghana, Liberia, Mali, Nigeria, Sierra Leone, Angola, Burundi, Chad, Rwanda, Zaire, Botswana, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Seychelles, Somalia, Swaziland, Tanzania, Uganda and Zambia.	Sudan, Ivory Coast, Niger, Senegal, Togo, Upper Volta, Cameroon, Congo, Gabon, Madagascar.	Mauritania, Central African Empire, Djibouti.

The expatriate population in most cases refer to the families of technical assistants in that particular country.

B. Selection of localities and reporting units

36. Generally, no sampling methods are used by the countries of the region in selecting localities or units from which data would be collected. The selections are usually purposive. The main criterion in the case of localities being ease of accessibility and concentration of the population to be covered.

37. The criterion in the selection of reporting units is based on the size of the establishment, its popularity, availability of commodities in that particular unit and also the types of commodities the unit might be specialising in. Where establishments are nationalised as in Tanzania, prices are collected from any unit where items to be covered are available.

C. Data Collection

38. Sampling methods based on probability have not been used by the countries in selecting the reporting units. The frequency of price collection, either daily, weekly, monthly, quarterly, semi-annually or annually depends to a large extent on the price variability of the individual item to be priced. Quite commonly, food items are collected weekly with fruits and vegetables on a daily basis by most countries. Other items are collected monthly with the exception of rent, as illustrated below, and domestic servants' wages which are either collected quarterly or their estimation based on annual surveys.

39. Price quotations are mostly collected by agents by direct personal interview from retail shops, markets and service establishments. The majority of countries fall under this category. Direct purchasing method is also used by some countries on food items in the local markets and the quantities of such items determined by the statistical office by direct weighing. No country uses mail questionnaire method alone but rather a combination with one or two more methods. Country practices are as follows:

Direct Purchasing and personal interviewing	Direct Purchasing and Mail Questionnaire	Personal Interview and mail Questionnaire	Direct Purchasing, Personal Interviewing & Mail Questionnaire	Personal Interview
Cameroon, Chad, Ivory Coast, Kenya Malawi, Swaziland, Zaire	Madagascar, Zambia	Cape Verde Djibouti	Seychelles Tanzania Uganda	Rest of the countries (29 in all)

D. Pricing of Seasonal Items and Adjustments

40. Different methods are followed by the different countries of the region in accounting for seasonal fluctuations of certain items like fruits, vegetables, clothing, etc. The various methods and the countries following these methods are enumerated below.

Method of accounting for seasonality	Countries utilising the method
Last price of the item maintained until the end of the off season	Cameroon, Chad, Djibouti, Ethiopia and Lesotho
Items are omitted from the index and their weights distributed among other items in the sub group.	Egypt, Ghana, Libya and Zambia
Monthly item weights are shifted within the constant group weights	Madagascar
Use 12 month moving averages moving averages	Kenya, Tunisia
Use 3 month moving averages	Morocco
Inpute price relatives from price changes of items still available	Malawi, Sierra Leone
Prices are collected monthly according to a mobile basket of fresh fruits and vegetables	Algeria
Selection of fruits and vegetables made t to insure uniformity all year round	Congo, Senegal.
Use of a sliding scale of weights	Mauritius

41 The rest of the countries not included above do not include seasonal items as index items and as a result do not account for seasonal fluctuations of item prices in their index calculations.

E. Rent Quotations

42. The collection of rent quotations has its own problems. The difficulty lies in obtaining comparable data for the same quality of houses over time and the right information reflecting changes in the cost of housing relevant to the special consumer group for which the index is compiled. Nevertheless, most of the countries of the region compile an all item index including rent excepting for Angola, Central African Empire, Djibouti, Ethiopia, Gabon, Madagascar, Mauritania, Malawi, Rwanda, Senegal, Swaziland, Uganda and Zaire which exclude rent. Cameroon includes rent in the index for Yaounde but excludes it for Douala index. Tanzania excludes it for the low and high income groups of Dar-es-Salaam but includes it for the middle income group and the national indexes. Congo excludes rent for the European index. Mali calculates only an index for food items. Cape Verde, Mozambique and Upper Volta are not specific as to whether rent is an index item or not.

43. Due to the difficulties involved in getting rent quotations, many countries collect it on an infrequent bases, as shown below:

Monthly	Quarterly	Semi Annually	Annually	Infrequently
Ghana	Libya	Kenya	Mauritius	Egypt
	Somalia	Liberia	Nigeria	Sudan
	Sierra Leone			
	Tunisia			

44. The rent quotations for these countries are mostly obtained from a sample of dwellings. In Sudan the rents have been stable for a long time and this does not necessitate any changes. In Egypt rents are kept constant until the next family budget survey, an interval of roughly 10 years. This period seems to be too long when considering the economic changes that go along with inflation, the new dwellings in the market during the period etc. A shorter period of say 5 years would be more reasonable. Cameroon bases her rent quotations on reports by a real estate company and Algeria from records on rent controlled dwellings. Zambia collects it from municipal authorities in charge of housing.

F. Frequency of Compilation

45. The majority of countries compile their indexes monthly and only one country, Rwanda, compiles the index annually. About four countries compile theirs quarterly, these are Cape Verde, Djibouti, Lesotho and Sierra Leone. Some of the countries that compile indexes for different population groups use different frequencies for each index:

- Malawi: Monthly for the low income group and quarterly for the high income group.
- Senegal: Monthly for the expatriates and quarterly for the Senegalese.
- Tanzania: Months of January, March, May, June, July, September, November, and December for the low income group; quarterly for the middle income group and the national index; semi-annually for the high income group.

G. Formula used

46. All the countries of the region with the exception of two, Cape Verde and Rwanda, use the Laspeyres formula - base weighted arithmetic averages of price relatives, in compiling their indexes. The two countries use simple unweighted arithmetic averages of price relatives.

H. Weighting system

47. Generally, the weights of a consumer price index are based on the results of a household expenditure survey and almost all the African countries have conducted such surveys for their various indexes. The surveys conducted have often covered a specific group of the population with special specifications, for example,

Algeria (skilled and unskilled, salaried and unsalaried workers - 1959): Ethiopia (households with a monthly income of less than 400 birr - 1963); Gabon (European families with a monthly income of over 100,000 CFA - 1963); Liberia (1963) and Sierra Leone (1960/61) (a sample of clerical workers and wage earners of 2 or more persons); Ivory Coast (households of wage earners with 4 or 5 persons - 1956); Uganda (families of senior civil servants - 1963); Zaire (Government employees earning 4,000 to 12,000 CFA per month - 1962). About 4 countries have so far not conducted any household expenditure surveys. The countries are Angola which up to now uses arbitrary constant weights; Swaziland whose weights are based on the consumption pattern of the low income groups of Kenya and other countries; Cape Verde and Rwanda which calculate simple unweighted arithmetic averages as mentioned above.

48. The surveys on which the results of the indexes are derived are too old as seen from above. Most of the countries have conducted their surveys in the late fifties and early sixties, and a few in the late sixties and seventies. A survey in the late fifties means that the results so derived have been in use for over 20 years. Under such circumstances the index does not really measure the purpose for which it was intended to measure. It is advisable to carry out these surveys more frequently so that the results thus obtained could be more useful to the economy. An interval of 5 years is more reasonable. For more details on each country practice, please refer to Annex I-c at the end of the paper.

VI. Conclusion

49. It is encouraging to note that almost all of the countries in the African region compile price statistics. A few that have not been included in the analysis might be compiling this statistics but at the time of writing the report, no information on these countries was available.

50. Summarising the progress made in all the countries, it is noted that five countries (Egypt, Morocco, Ghana, Senegal and Zambia) have indexes of production, index numbers of wholesale prices and consumer price indexes. Another thirteen (Algeria, Libya, Sudan, Tunisia, Ivory Coast, Nigeria, Cameroon, Central African Empire, Gabon, Rwanda, Ethiopia, Kenya and Uganda) have indexes of production and consumer price indexes or wholesale price indexes and consumer price indexes in that combination. The rest, twenty-five in all, have consumer price indexes only. It is hoped that the seminar would stimulate further developmental work in this field.

A. Producer Prices and Index Numbers of Production

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base period	Revision of weights	Number of items/ commodities	Formula(e) used	Type of weights used	Remarks/notes
North Africa											
1. Algeria	Index of industrial production	The index covers, mining, manufacturing, electricity and gas.	Quarterly and annually			1969=100	1954 original base 1950.	107 items	Laspeyres	Weights were derived from the gross value of production in the base year. However, in aggregating these indices into index numbers for broader classes of industrial activity, the weights are based on contribution to GDP at market prices.	The indexes are adjusted for differences in the number of working days in the quarter (except the mining index after 1961) but not for seasonal variations. The annual indexes are derived as averages of the quarterly indexes.
2. Egypt	Index of Industrial production.	The index covers mining and quarrying, manufacturing, electricity and gas.	Annually			1966=100	1959		Laspeyres	The weights used are based on value added for each activity during the period July 1965 to June 1967.	Elementary series of relatives are based on value of gross output in each industry deflated by wholesale price indexes with 1965/66 as base.
3. Libya	Indexes of industrial production in manufacturing industries	It covers manufacturing establishments engaging 20 or more persons.	Annually	Price quotations obtained from 42 manufacturing enterprises		1964=100		25 main groups of commodities	Laspeyres	Weights assigned to the groups are based on the value of net output obtained from the industrial census of 1964. However, internal weights within industry groups are assigned on the basis of values of group output.	
4. Morocco	Index of industrial production	It covers mining manufacturing and electricity; mainly those establishments engaging 10 or more persons. The index is of national coverage.	Quarterly	Prices are collected from 105 producers and from the Ministry of Mining and Energy.	Direct personal interview method used.	July 1975-June 1976=100	1958	169 commodities	Laspeyres	The weights were calculated as a percentage of the item over the overall value of products in 1975. A survey on the turnover was conducted in 1975 on a sample of establishments.	The establishments included in the sample are those equipped with motor driven machinery with a capacity of more than two horse power. Prices are observed at their first stage of transaction, excluding taxes.
West Africa											
5. Ghana	Index number of industrial production (a) Indexes of production (mining and electricity) (b) Indexes of gross output in fixed 1962 prices (manufacturing)	It covers mining, manufacturing and electricity production.	(a) Monthly and annually (b) Quarterly and annually.	Data is furnished by 438 manufacturing, 17 mining and 22 electricity establishments.	Mail questionnaire method used.	(a) 1962=100 linked to indexes of 1958=100 (b) 1962=100		A total of 160 commodities	Laspeyres	The indexes are based on the gross value of output at 1962 prices. The deflators used for manufacturing are the wholesale prices for Ghana. Weights used to work out the general index are proportional to value added in the three divisions in 1962.	The coverage of establishments in the manufacturing division is restricted to establishments engaging about 30 persons or more.
6. Nigeria	Index of industrial production.	It covers manufacturing, mining and electricity.	Quarterly and annually	Data is obtained from about 27 industry groups engaged in manufacturing activities, no number given for mining and electricity.	Mail questionnaire method used.	1965=100		38 series in manufacturing	Laspeyres-base weighted arithmetic average of Quantity relatives.	Weights are based on an industry's contribution to total value added by the 27 industry groups. Sub-weights are based on the contribution of each series to total output or input for the particular industry group in 1963.	
7. Senegal	Index of industrial production.	Mining, manufacturing and electricity and also general index.	Quarterly and annually.			1959=100		38 commodities	Laspeyres	In combining the three indexes into the general index, the weights used are proportional to value added in these industries in 1959.	In determining the elementary series, the principle indicator in mining and manufacturing is quantities produced, and in electricity the indicator is Quantity sold. All in all, 41 elementary series are used.

ANNEX 1. INDEX NUMBERS AND PRICE STATISTICS

A. Producer Prices and Index Numbers of Production (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments /units	Method of price collection	Base period	Revision of weights	Number of items/ commodities	Formula(e) used	Type of weights used	Remarks/notes
Central Africa											
8. Cameroon	Index on industrial prices. (Indices sur les Prix Industriels)	The index embraces large enterprises throughout the country engaged in production, mainly manufacturing industries.	Quarterly	Data is collected from about 112 enterprises.	Questionnaires are left with the producers by the agents and collected after some time.	1974/75=100 (July to June)	The index is new, no revision so far.	-	Laspeyres	The weights used are based on the total turnover per product for the base year, turnover of all enterprises by kind of activity and total turnover of all enterprises engaged in production during the base year.	In selecting the reporting establishments, a questionnaire was sent to all enterprises engaged in production and those that did not complete the questionnaire well, thus regarded small, were eliminated. There are three types of indexes calculated: (a) an index by item for all enterprises, (b) an index by kind of activity and (c) a general index.
East Africa											
9. Kenya	(1) Construction cost index.	All residential, non residential and civil engineering works.	Monthly	Data is collected from 24 building and construction companies - also manufactures and suppliers.	Personal interviews and telephone contacts.	Dec. 1972=100	-	73 items	Laspeyres	Weights were based on the import materials of residential and non residential construction and civil engineering works, a survey of which was conducted in 1972.	The index on construction cost is calculated only for the city of Nairobi, whereas the indexes on manufacturing and mining and quarrying cover the whole country.
	(2) Quantity Index of Industrial Production	Covers manufacturing output of all items with annual gross output of £40 million and above.	Annually	Data collected from producers-manufacturing industries-800 firms	Mail questionnaire	Dec. 1972=100	1967	196 items	Fisher's ideal index	Value added contribution to Gross Domestic Product by all manufacturing establishments.	
	(3) Mining and Quarrying Index	All the mining and Quarrying output.	Annually	Data collected from producers-mining companies. - 30 firms	Mail questionnaire	Dec. 1972=100		12 items	Fisher's ideal index	Value added contribution plus input derived from surveys conducted.	
10. Uganda	Industrial Production Indices.	It covers processing and manufacturing industries in Kampala, engaging 10 or more persons.	Quarterly	Data is directly obtained from 325 producers and marketing boards.	Mail questionnaire.	1966=100	-	15 main groups	Laspeyres	The weights used are based on value added. These were derived from the results of the 1966 survey of industrial production.	In calculating the index, quantities are used instead of prices because most of the commodities produced are fairly homogeneous and therefore considered justifiable to use quantities, quality changes in production are thereby concealed. In addition, value series can not be used because there are no appropriate price series for deflation.
11. Zambia	Index of industrial production.	Covers mining, manufacturing and electricity industries.	Monthly	Data is obtained from selected producers in the three sectors. There are about 250 small establishments.	Mail questionnaire method is used.	1973=100	Revision was done in 1969 and up to now this year is still maintained as base for proper comparison with other period.		Laspeyres	The weights were derived from the Census of Industrial Production in 1969 and 1973. The weights of major divisions, divisions and major groups are derived from the net output defined as the contribution to GDP in basic values.	Prices are obtained from selected establishments in mining, quarrying, manufacturing and electricity generation. With large establishments the coverage is 100%. The establishments provide data on quantity of production, sales value of production, number of days worked and number of man hours worked each month. In compiling the index, (a) production relatives are worked our for each company (rendered to daily averages for month); (b) the indices for industries covered under each division are obtained as weighted averages of the company production relatives; (c) indices for major divisions are obtained as weighted averages of the divisional indices and (d) the overall indices is obtained as a weighted average of mining, manufacturing and electricity indices.

ANNEX I

b. Wholesale Prices and Wholesale Price Indexes

Sub-region and Country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base period	Revision of weights	Number of items/ commodities	Formulae used	Type of weights used	Remarks /notes
North Africa:											
1. Egypt	Index numbers of Wholesale Prices	The index is of national coverage and is mainly on agricultural and industrial commodities	Monthly	For agricultural commodities data is collected from wholesale outlets and for industrial commodities data is obtained from producers	Direct personal interview method is used	1965/66=100	There has been no revision of weights prior to the present	Agricultural-108 commodities Manufactured goods 332 commodities	$\frac{\sum P_1 \times P_0 q_0}{\sum P_0 q_0}$	The weights were derived from the agricultural production, industrial production and value of imports in 1965/66	For each commodity, data is collected from three different establishments. In the case of seasonal items, the commodity is excluded from the list right at the beginning of the season and its weight distributed among other items. If an item of a given quality ceases to be produced, it is substituted by another item having the same or similar characteristics. Mostly these items are selected according to their importance in the consumption pattern.
2. Morocco	Wholesale Price Index in agriculture, Manufacturing and Energy	The index covers 9 big cities of the country	Monthly	Data is collected from 300 sales outlets - wholesalers cooperatives and sales representatives and also government administration for fixed prices of certain items.	Direct personal interview method used	1939=100		There are 231 items in the index	Laspeyres	Weights are based on the value of goods domestically consumed, i.e. production plus imports less exports.	Items are classified according to whether they are domestic or imported goods. Seasonal items are only observed when they appear in the market. A gross index for these items is calculated, a seasonal coefficient worked out and used to adjust the seasonality in the overall index.
3. Sudan	Wholesale Price Index	The index is of national coverage	Quarterly	Quotations on imports and export prices are collected from custom and excise departments. Data on other items is collected from auction markets and marketing boards.	The department of statistics receives information on a regular bases from the source establishments.	1953=100	None	Food, drink and tobacco - 20 items Raw materials - 15 items Other manufactured goods - 3 items	Laspeyres	Weights were obtained from the estimated quantities of goods sold in the domestic markets during 1953	There is no seasonal adjustment done for seasonal items. In the case of items that disappear from the market during the quarter, prices of the previous quarter of the same commodity, is taken. In this case quality change is considered to be of no importance, as a result no adjustment is made for it.
4. Tunisia	Wholesale Price Index	It is of national coverage	Monthly	Data is collected from about 200 establishments which sell products at wholesale prices namely: wholesalers, marketing boards and also sales representatives	Direct personal interview method followed	1970=100	None. Original base was 1949	265 items	Laspeyres	The weights were derived from the survey conducted in 1970 on wholesale prices of commodities	In selecting the enterprises, the main criterion is the annual turnover of the establishments. Concerning seasonal agricultural products, there is a special index computed called "The sensetive index of wholesale prices for food products." Its base year is also 1970
West Africa											
5. Ghana	Wholesale price Index	The index covers enterprises engaged in wholesale trade in Accra only	Monthly	Data is obtained from leading wholesale traders and from the Food Marketing Board	Mail questionnaire method used	1961=100		114 items	Laspeyres	Weights are based on the commodity supply for domestic consumption and export purposes. The value of consumption of local food was estimated from the household budget survey conducted in 1961/62	Prices of imported and exported commodities are c.i.f. and f.o.b. respectively.
6. Ivory Coast	Wholesale Price Index of Building Materials	The index covers enterprises selling building materials at wholesale prices in Abidjan	Monthly	Data is collected from wholesales of building materials		June 1956=100			Laspeyres	Weights for imported items are based on the values of imports of the former West Africa in 1956, for domestic items on the estimated value of local production	Tiles with a weight of 5, 4% are not included in the index
7. Senegal	Wholesale Price Index of Building materials	It covers the city of Dakar only.	Monthly	Price data collected from business outlets and private contractors in Dakar		January 1972=100, linked to the previous index base 1951=100	Original base April 1951=100	25 items	Laspeyres	Weights are derived from declarations made by business outlets on the quantities and values of commodities sold at wholesale and by declarations of private contractors of the quantities and values of goods imported	Prices used in the calculation of the index include taxes.

B. Wholesale Prices (Cont'd)

Sub-region and Country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base period	Revision of weights	Number of items/ commodities	Formula used	Type of weights used	Remarks/notes
Central Africa											
8. Central African Empire	Wholesale Price Index	It is a general index covering wholesale enterprises in the city of Bangui only	Monthly	Data is collected from wholesalers by agents	Direct personal interview method used	1958=100	-	53 items	Laspeyres	Weights are based on a survey conducted at the end of 1958	Prices include principle taxes such as custom duties, transport charges etc.
9. Gabon	Wholesale Price Index	It covers the wholesale trade in Libreville city.	Bi-monthly	Prices are collected from large importers and wholesalers in Libreville	Mail questionnaire method used	June 1966=100	Original base 1958	113 items	Laspeyres	The weights are based on the volume of wholesale transactions	Prices include indirect taxes, for imported commodities c.i.f. prices are used
10. Rwanda	Elementary Indexes of Wholesale Prices Observed in Kigali	It covers the city of Kigali	Annually	Prices are collected from about 11 establishments which comprise of wholesalers, marketing boards and cooperatives.	Direct personal interview method used.	1967=100	None	36 items	Simple averages	The index is not weighted, only an elementary index is calculated	Prices of commodities include indirect taxes and other charges. For imported items, c.i.f. prices are used. When certain items disappear from the market, they are replaced by items of the same quality, otherwise the calculation of the index is stopped until such items reappear.
East Africa											
11. Ethiopia	Indices of wholesale prices of selected imports and exports commodities	The index covers the city of Addis Ababa only.	Quarterly	Data is collected from wholesalers, marketing boards and sales representatives - making 340 establishments	Mail questionnaires and direct personal interview	Exports: 1976=100 Imports: 1975=100	Prior to the present base period, the weight bases were exports: 1968=100 imports: 1968=100	Exports: 28 items Imports: 184 "	Laspeyres	The weights are based on the value of imports and exports of the base periods	If an item is out of production for a period of 3 months, the last price when it was still in production is maintained, but if it is out of production for over 3 months, it is cancelled and its weight proportionately distributed to other items in the group.
12. Zambia	(a) Index Numbers of wholesale prices	It covers the wholesale enterprises in agricultural, mining, quarrying, manufacturing and electricity throughout the country	Quarterly	Data is collected mainly from wholesalers, marketing board and markets covering about 200-300 establishments	Mail questionnaire method used	1966=100	No revisions so far	Not specified	Laspeyres	Selection of commodities was restricted to those which had a weight of 0,1% in the total market value of products traded during 1966, thus the weight of each commodity was derived from the total value of domestic production marketed that year.	The selection of varieties and each type of commodity to be priced was taken after discussion with the Price controller, traders and importers. Care was taken to include important varieties which showed large fluctuations in prices; include biggest wholesale traders in every selected commodity, whenever possible, exclude traders who seemed unwilling to submit returns. In calculating the index from the price quotations sent in, item indices are computed, from these the sub-group, group and all-item indices are calculated
	(b) Price Index of of Building materials	The index covers all building material manufacturers in the country	Quarterly	Data is collected from the manufacturing industries of building materials including quarrying companies	Mail questionnaire method used	31st Dec. 1974=100	Original base 1961 Revised base 1966	111 items	Laspeyres	The group weights were derived from the results of the Census of Construction in 1973. The commodity weights were determined from information provided by suppliers regarding the sales of various items.	

C. Retail Prices and Consumer Price or Cost of Living Indexes

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
North Africa											
1. Algeria	Retail price index	The index relates to the consumption pattern of 560 families of skilled and unskilled workers, salaried and low salaried employees living in Algiers and its suburbs.	Monthly	Prices are collected by agents from various establishments in the 5 districts of Algiers. The period of collection depends on the item to be collected.	Direct personal interview method used	1964=100	Original weight base 1959.	167 items	Laspeyres	The weights were obtained from a family expenditure survey conducted in 1959 in the middle and large urban centres of the country.	The frequency and period of price collection varies. In the markets, prices are collected daily except Sundays; from butcher's once every 10 days, from groceries twice per month, from big stores fortnightly, from hat and shoe shops monthly. Rent quotations are obtained from records on rent controlled dwellings. Seasonal fluctuations in the prices of fresh fruits and vegetables are accounted for by varying items within monthly baskets of constant weights.
2. Egypt	Monthly Bulletin of Consumer Price Index.	The index covers all the urban population of Cairo and about 8 selected cities of the country. For the rural section the index is the average of 3 localities, these being the capitals of each governorate - the 8 cities mentioned above.	Monthly	Data is collected from retail establishments and usually 3 outlets are selected for each commodity.	Direct personal interview method used.	1966/67=100	The original base was 1939 and no revision was done till the present base.	Urban all items - 245 commodities Rural all items - 135 commodities	Laspeyres	The weights used for the index were derived from the family budget survey conducted from July 1966 to June 1967.	The general index comprises of 7 main groups comprising 21 items. In the urban index the groups are made up of 93 items which are again sub classified into 245 commodities similarly, the rural index has 65 items sub classified into 135 commodities. Seasonal items are usually excluded from the index at the beginning till the end of the season and their weights distributed among the remaining items in the same group. In the case of disappearing commodities from the market, other commodities with the same or similar characteristics are selected and their base prices estimated with reference to the base and current prices of the disappearing commodities. Commodities are mainly selected according to their importance in the consumption pattern.
3. Libya	Cost of living index.	It covers the Libyan wage earners living in Tripoli.	Monthly	Prices are collected by agents from about 150 retail outlets and service establishments.	Direct personal interview method used.	1964=100		Food: 167 items Other: 267 "	Laspeyres	The weights and selected items were derived from a family expenditure survey conducted in 1969.	Prices of food items and clothing are collected monthly, those for services and recreation quarterly or twice a year. Rent quotations are obtained from a fixed sub-sample of dwellings and from newly rented dwellings.
4. Morocco	Cost of living index.	It covers the 8 large towns of the country- Casablanca, Rabat, Kénitra, Fès, Tétouan, Oujda, Marrakech and Agadir, and reflects the consumption pattern of the middle income group.	Monthly	Prices are collected by agents from markets and retail dealers, about 2 000 outlets.	Direct personal interview method used.	1972/73=100 (May-April) 1958/59 (Oct.-Sept.)		Food: 82 items Others: 128 items	Laspeyres	In determining the weights the results of the 1970/71 household expenditure survey and the 1971 population census were used.	Prices of food are collected weekly from the markets and retail dealers while those of other goods and services are collected during the last week of the month. Seasonal fluctuations in the prices of fresh fruits and vegetables are accounted for by shifting monthly item weights within the constant group weights and by computing three-month moving averages of the unadjusted indexes. Rent quotations are obtained from 935 household dwellings.
5. Sudan	Consumer Price Index.	The index covers the low income group with an annual income of less than L.S. 500 (Sudanese lire); the high income group with an annual income of over L.S. 500; and expatriates. Only greater Khartoum is covered by the index.	Monthly	Prices on food, clothing etc are collected by agents from three market areas in Greater Khartoum. Data for electricity, water, education are collected from authorities. Rent quotations have been stable since December 1969.	Direct personal interview method used.	Jan. 1970 is the base period for the low & high income groups. For expatriates, the base is still 1951.	Prior to the present base, January 1951 was the base period for the index.	Low income: Food: 31 items Others: 39 " High income: Food: 45 items Other: 52 "	Laspeyres	The weights for the index were determined from the 1967/68 household budget survey.	The household budget survey was conducted in 1967/68 among a random sample of 1 500 households of six members, with an annual income of between L.S. 300 and L.S. 500.

INDEX NUMBERS AND PRICE STATISTICS

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
NORTH AFRICA (cont'd)											
6. Tunisia	General Consumer Price Index	The index covers 12 main important cities of Tunisia.	Monthly	Price quotations are collected from 1 505 sales outlets throughout the 12 cities.	Direct personal interview method used.	1977=100	Original base year was 1960/61, but the index was for Tunis only.	Food: 191 items Others: 376 items	Laspeyres	The weights were derived from the household expenditure survey conducted in 1974/75. Use was also made of the statistics of suppliers to markets such as ccoperatives etc. The base year prices were determined as the average of the 12 months of the base period.	Prices are collected by agents from 49 markets, 267 groceries, 218 clothing shops, 649 shops selling household appliances, furnishings and 322 shops engaged in various kinds of activities and services. Prices from markets are collected daily while those of other items are collected once a month. A large variety of items are observed in more than one sales outlet. Rent is included as an index item.
WEST AFRICA											
7. Cape Verde Islands	Retail Price Index.	The index covers only the town of Praia.	Quarterly	Prices are collected from 4 main stores and from the municipal markets.	Personal interview and mail Questionnaire methods used.	1960=100	Original base 1950.	Food: 54 items Others: 7 "		The index is computed as a simple unweighted arithmetic averages of price relatives.	Prices used in the computation of the index are those of essential consumer goods. Prices of these goods are collected quarterly by agents from 4 main stores, and municipal markets. Data for electricity are obtained from the Administration of the "Concelho." No account is taken of seasonal fluctuations in item prices.
8. The Gambia	Consumer Price Index.	It covers the low income group of the city of Banjul, towns of Serrekunda and Bakau.	Monthly	For local produce data is collected from 4 markets; for imported items from 21 shops; rent from 42 households and rates and charges from 24 outlets.	Direct personal interview method is used.	January-December 1974=100	None	Food and drinks- 52 items Others:- 57 items	Laspeyres $\frac{\sum P_{ni} q_{oi}}{\sum P_{oi} q_{oi}}$	A household budget survey was conducted in 1968/69 in Bangui city from which the weights were derived.	For local and imported items prices are collected fortnightly, rent quarterly and rates and charges monthly. The weights for the index were obtained from the 1968/69 household budget survey but the system of price collection covering all items was not started until January 1974. Prices were collected fortnightly for the whole year. This made it possible to have a different comparison base (January - December 1974) from the weight base of 1968/69.
9. Ghana	(a) National Consumer Price Index.	It covers the rural and urban areas of the country, on people earning N¢ 1200 or less per annum.	Monthly	Prices are collected weekly from 9 regional capitals and 27 rural centres.	Direct personal interview method used.	March 1963=100	-	215 items	Laspeyres	The weights are based on the results of the 1961/62 national household consumption survey.	Separate indexes are compiled for the 9 urban areas (overall urban index) and 27 rural centres (overall rural index.) The national index is a weighted average of the two indexes, the weights being 23.75 for the urban and 76.25 for the rural.
	(b) Consumer Price Index - Accra.	The index covers the Ghanaian households in Accra with an annual income below £ 600.	Monthly	Prices are collected from stores, markets and service establishments.	Direct personal interview method used.	March 1963=100	1961	Food: 61 items Others: 92 items	Laspeyres	Weights were derived from a family expenditure survey conducted between mid-August to Mid- November 1961 among Ghanaian households earning £ 600 or less p.a. in Accra. One-person households were excluded from the index.	Prices are collected by agents on Thursday of each week. Rent quotations are obtained monthly from a sample of 374 households. The weights for fresh fruits and vegetables during off-season periods are imputed to the remaining sub group items.

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
WEST AFRICA (cont'd)											
10. Ivory Coast	(a) Consumer Price Index (Africans)	It covers the African wage earners' families with 4 or 5 persons in Abidjan. It excludes families with more than 3 adults and more than one wage earner.	Monthly	Prices are collected from markets, stores and services establishments.	Direct personal interview and purchasing.	February 1960=100		Food: 47 items Others: 53 "	Laspeyres	Weights were derived from a family expenditure survey carried out in August - September 1956 among the families of wage earners with 4 or 5 persons.	Prices of food, fuel and certain other items are collected daily from 4 main markets. Prices of other goods and services are obtained once a month. Rent quotations refer to low priced apartments of 3 rooms.
	(b) Consumer Price Index (Europeans)	It covers European families of 2 or more persons in Abidjan.	Monthly	Prices are collected from 4 markets, 4 large stores, and service establishments.	Direct personal interview	1960=100		Food: 57 items Others: 83 "	Laspeyres	The weights were derived from a family expenditure survey conducted in June 1961 among European families.	Prices of local food, fuel and certain items are collected daily, of imported food items weekly and all other items at the end of each month. Rent is not included as an index item not taken into account in determining the weights.
11. Liberia	Consumer Price Index for Monrovia.	Index relates to the consumption patterns of low income households with a total monthly income of not more than $ 250 in Monrovia.	Monthly	Prices are collected from 18 stores, 2 markets and 14 service establishments.	Direct personal interview method used.	September-November 1964=100		Food: 32 items Others: 47 "	Laspeyres	Weights were obtained from the results of the family expenditure survey conducted from October to December 1963 among a sample of wage earners' and clerical employees' households of 2 or more persons. These weights were revised according to a limited survey conducted in June 1964.	Prices are ascertained twice a month for food items and once a month for most other goods and services. Rent quotations are obtained in January and July each year for a sample of 100 dwellings. Items subject to seasonal fluctuation are not included in the index.
12. Mali	Retail Price Index for Food (Africans) in Bamako.	The index covers the low income group among the African population in Bamako city only.	Monthly	Price quotations are collected from 7 markets every week.	Direct personal interview method is follows.	1962/63=100 (1st July-1st July)	None	Food: 24 items	Laspeyres	The weights used were obtained from a household budget survey conducted among African families during the base year in Bamako.	The base prices were collected from selected markets during the base period - 1st July 1962 to 1st July 1963 - and the averages worked out. The overall index has 133 items of which only 24 are used to calculate the food index.
13. Mauritania	Consumer Price Index for European families	It covers the European families in Nouakchott only.	Monthly	Data collected from 4 retail shops, from markets and other establishments.	Direct personal interview method used.	January 1961=100		Food: 74 items Others: 37 "	Laspeyres	Weights were derived from a family expenditure survey conducted in 1961 July among 450 European households in Nouakchott.	Rent is not included as an index item.
14. Niger	African and European Consumer Price Index	The indices relate to the city of Niamey only.	Monthly	Data is mainly collected from shops and markets in the capital city.	Method of direct personal interview is used.	1963=100 - for the index on African consumption. 1964=100 - for the index on European consumption.	None	Index for African Food: 25 items Others: 36 items Index for Europeans Food: 45 items Others: 54 items	$I=100\frac{\sum a_i \frac{P}{P_o}}{\sum a_i p_o}$ P=current Price P_o= base price a_i= weights	The weights used are based on the household budget surveys conducted in 1963 and 1964 on African and European families respectively in the city of Niamey only.	Data on food and other items is collected twice a month from the selected shops and markets by the collecting agents. Quotations for certain services are obtained monthly from official tariffs. In the case of items that disappear from the market. Other items of similar quality are substituted. The criterion used in determining the inclusion of an item in the index, as defined in the household budget surveys, is by function, quality and importance in the consumption pattern.

INDEX NUMBERS AND PRICE STATISTICS

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
WEST AFRICA (cont'd)											
15. Nigeria	Lagos Consumer Price Index	It covers the low income group not earning more than £-560 per annum.	Monthly	Prices are collected from markets and leading stores.	Direct personal interview method used.	1960=100		Food: 46 items Others: 110 items	Laspeyres	The weights were obtained from the results of the household expenditure survey conducted between October 1959 and September 1960 among families of clerks, artisans and labourers earning not more than £ 560 per annum in 1960.	Prices of items from market places are obtained daily. Rent quotations are obtained annually from a random sample of dwellings. The same type of index for the low income group is calculated for other towns namely Benin, Ibadan, Ilorin, Kaduna, Kano, Port Harcourt, Sapele, Warri and Zaria. Out of the indexe of these towns, a composite consumer price index is worked out, thus a national index for the same groups.
16. Senegal	(a) Consumer Price Index for Africans	Covers the wages earners (manual labourers) in Dakar.	Quarterly	Prices are collected from retail outlets and local markets.	Direct personal interview method used.	1967=100	-	Food: 71 items Others: 80 "	Laspeyres	Weights were based on a family budget survey conducted among families of wage earners with a monthly income of less than 100 000 CFA in 1960.	Prices are collected from shops and local markets by agents. The choice of items in the fruits and vegetables group had be n made so as to ensure uniformity all the year round.
	(b) Consumer Price Index for Europeans	Covers the technical assistance personnel in Dakar.	Monthly	Prices are collected from the most important shops and markets in Dakar.	Direct personal interview method used.	January 1972=100	1961	Food: 86 items Others: 101 items	Laspeyres	Weights were derived from the results of a survey conducted among French technical assistance personnel.	Rent is not included as an index item. Prices are collected from most important shops and markets. Water, electricity and gas quotations are obtained from official tariffs, for domestic servants' wages from the minimum wage scales fixed by governments.
17. Sierra Leone	The Freetown Consumer Price Index	It covers Freetown and the mining areas of Sierra Leone and relates to the low income families of 2 or more persons with no earner receiving more than Le 40 per month.	Quarterly	Prices are collected from public markets and retail outlets.	Direct personal interview method used.	1961=100		Food: 34 items Others: 61 items	Laspeyres	Weights were derived from the family expenditure survey conducted between December 1960 and November 1961 among a sample of 495 African households of 2 or more persons, mainly the low income group.	Prices for food items are collected from 3 major public markets. The frequency of collection of most items is either weekly, monthly or quarterly depending on the variability of the individual item. Rent quotations are tained from 91 dwellings each qu ter, rates for commercial servi s annually. Seasonal fluctuations in the prices of certain items are accounted for by assuming that the price change for an item during off-season is equal to the average change in prices for the non-seasonal items of the same group.
18. Togo	(a) Consumer Price Index for Africans	The index covers African households in Lome	Monthly	Prices are collected from 3 local markets- "Great Market", markets Togo and Bé; from main stores and service establishments.	Direct personal interview methods used.	1963=100		Food: 53 items Others: 98 "	Laspeyres	The weights were derived from the results of a household expenditure survey conducted from June 1964 to June 1965 among African private households.	Prices for local food items are obtained twice a week from "Great market" and once a week from markets "Togo" and "Bé." Prices of other items are collected once a month.
	(b) Consumer Price Index for Expatriates	It covers the technical assistance personnel in Lomé	Monthly	Prices are collected from local markets, retail shops and service establishments.	Direct personal interview method used.	May 1961=100		Food: 41 items Others: 68 "	Las,eyres	Weights were derived from a survey conducted among families of French technical assistance personnel in Lomé in 1961.	

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/commodities	Formulae used	Type of weights used	Remarks/notes
WEST AFRICA (cont'd)											
19. Upper Volta	(a) Consumer Price Index for single unskilled workers in Ouagadougou.	It covers the unmarried unskilled workers in Ouagadougou.	Monthly	Prices are collected from markets and retail shops.	Direct personal interview method used.	1958=100		Food: 20 items Others: 47 items	Laspeyres	The weights were derived from a family expenditure survey of single unskilled workers in 1958.	Prices are collected monthly by Agents from markets and retail outlets. Direct measurement like weighing is used for some local food items.
	(b) General Consumer Price Index for European families in Ouagadougou.	It covers the families of technical assistants in Ouagadougou.	Monthly	Prices are collected from markets and retail outlets.	Direct personal interview method used.	1964=100		Food: 53 items Others: 74 items	Laspeyres	The weights were derived from a budget survey of 374 families of French technical assistants in November 1964.	Prices are collected monthly by Agents from markets and retail outlets. Direct measurement like weighing is used for some local food items.
CENTRAL AFRICA											
20. Angola	Consumer Price Index	The index relates to the middle class population in Luanda.	Monthly	Data is collected from large shops and markets in Luanda city.	Direct personal interview method used.	1939=100		Food: 30 items Others: 7 items	Laspeyres	Weights are arbitrary and constant.	Rent is not included as an index item. Prices are collected monthly by Agents from large shops and markets in the city.
21. Burundi	Consumer Price Index	The index covers the African families in Bujumbura.	Monthly	Prices quotations are obtained from 9 retail stores and 4 markets in Bujumbura.	Direct price observation and interview where necessary.	1963=100 April	Rare	Food: 25 items Others: 26 items	Laspeyres	The weights and selected items were derived from the family expenditure survey conducted in Dec. 1963 among households of Government officials representing all urban consumers. The survey was done on a sample basis.	Prices for most items are collected weekly by Agents from shops and markets. Prices of clothing are collected twice a month. Rent quotations are obtained from housing records while quotations on electricity, water and transport are obtained from relevant establishments. Items affected by seasonal fluctuations are not included in the index. The rent quotations collected are for workers with modest income (middle class).
22. Cameroon	(a) Consumer Price Index for Africans (Yaounde)	The index covers the African families of middle income level in the city of Yaounde only.	Monthly	For food items data is collected directly from 7 markets and for other items prices are collected from 75 outlets.	Direct personal interview and purchasing from establishments.	1958=100	The original weight base was 1955.	Food, beverages & tobacco= 61 items Others = 71 items	Laspeyres	Weights were derived from the household expenditure survey carried out in 1964/65 in Yaounde. These weights were determined by calculating the proportion of each item in the total expenditure in that year.	Prices for food items (including charcoal, wood) are collected by direct purchase by Agents from the markets three times a month. For other items, Questionnaires are sent to respondents, mainly big stores, to complete once a month. Sometimes personal interview method is also employed.
	(b) Consumer Price Index for Expatriates (Douala)	The index embraces the expatriate households in the city of Douala.	Monthly	Price quotations for all items are obtained from 50 outlets.	Direct personal interviews.	May 1956=100	Index was started in 1952 and revisions carried out in 1961, 1963 and 1966.	Food, beverages & tobacco= 63 items Others = 50 items	Laspeyres	- same as above -	Rent is not included as an index item. Food prices are also collected by direct purchase by Agents from markets three times a month in Douala. Other prices are collected from retail stores by interview or mail questionnaires.
23. Central African Empire	Consumer price index for non indigenous families	It covers the European households in Bangui	Monthly	Prices are collected from shops, markets and other service establishments.	Direct observation and personal interviews where necessary.	April 1961=100	Original base 1956	Food: 45 items Others: 44 items	Laspeyres	The weights were derived from a survey conducted among families of technical assistance officials in Bangui.	Rent is not included as an index item. No account is taken of seasonal fluctuations in item prices.
24. Chad	Consumer Price Index	The index covers only the high income group getting a monthly income of CFA 700 000 francs and over in N'Djamena city.	Monthly	Price quotations for all items are obtained from 15 establishments in the city of N'Djamena.	Direct personal interview and direct purchasing methods used.	1973=100	Prior to the present, the base year was 1964 but the index then was for the European population only.	Local products food= 57 items others= 16 items imported products food= 58 items others= 44 items	Laspeyres	A household expenditure survey was conducted in 1973 and the weights derived from the results of the survey. The prices of the survey were used as base prices.	Prices are collected by Agents between the 15th and the 20th of each month from the 15 establishments in markets where most of the food items are not available. Agents purchase the listed items and weigh them in the offices. Rent is included as an index item.

I. PRICE NUMBERS AND PRICE STATISTICS

C. Retail Prices and Consumer Prices or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Coverage of weight base	Number of items/ Commodities	Formulae used	Type of weights used	Remarks/notes
CENTRAL AFRICA (cont'd)											
25. Congo	(a) Retail Price Index for European families	The index covers European families in Brazzaville city.	Monthly	Prices are obtained by agents from various outlets and service establishments.	Direct observation and personal interviews.	January 1956=100	Original weight base, November-December 1947	Foods: 73 items Others: 85 items	Laspeyres	The weights were derived from a family expenditure survey conducted in February to March 1953 among some European families in Brazzaville.	Rent, education and transportation are not included as index items. The choice of items in the vegetables group has been made so as to ensure uniformity throughout the year.
	(b) Retail Price Index for African consumption	It covers the African families in the capital Brazzaville	Monthly	Prices are collected from 6 markets, 52 retail shops including 6 supermarkets, 10 confectionery and rent quotations from 36 residential dwellings.	Direct personal interview method used.	December 1957=100 early in 1979 a new index will be calculated with base as 1978		Foods: 100 items Others: 108 items	Laspeyres	The weights were derived from a household expenditure survey.	Prices for food items are collected twice a month and once a month for other items. There is no special treatment for seasonal items. Fruits, which are some of the items affected by seasonal fluctuations, have very insignificant weights, i.e. their weights are too small to affect the results of the index.
26. Gabon	(a) Consumer Price Index for Africans, Libreville	The index relates to African workers' families of 2 to 5 persons in Libreville	Monthly	Prices are collected by agents from retail shops and market	Direct personal interview	1962=100		Foods: 35 items Others: 30 items The index was adjusted from 125 items.	Laspeyres	The weights were obtained from a family expenditure survey conducted in 1961/62 among African families.	Rent is not included as an index item. Account is taken of seasonal fluctuations in item prices.
	(b) Consumer Price Index for Europeans, Libreville	It relates to the European households with a monthly income of over CFA 100 000 living in Libreville.	Monthly	Prices are collected by agents from retail shops and markets around the 15th of each month.	Direct personal interview.	January 1964=100	1964	Foods: 60 items Others: 67 items The index was adjusted from 155 items.	Laspeyres	The weights were obtained from a family expenditure survey conducted in 1963 among European families whose monthly income was CFA 100 000 and over in 1963.	Rent is also not included as an index item.
27. Rwanda	Elementary Consumer Price Index for Kigali city.	The index covers the African families of Kigali city.	Annually	Prices are collected from 20 establishments in Kigali city.	Direct personal interview method used.	1974=100	None	Foods: 47 items Others: 38 items	Simple averages	No household expenditure survey was ever carried out. As a result the index is not weighted, only simple calculations are done to get elementary index.	Rent is not included as an index item. Items that disappear from the market are replaced by others of similar qualities or else the price quotation of these items are suspended until they reappear in the market.
28. Zaire	Consumer Price Index.	It covers the African families with a monthly salary	Monthly	Data is collected from shops and 6 main markets in Kinshasa.	Direct purchase and personal interview	November-December 1961=100		Foods: 39 items Others: 21 items	Laspeyres	The weights were derived from a family expenditure survey conducted between the 3rd October to 1st November 1967 by means of a questionnaire addressed to (2) Government employees whose salary ranged between 4,000 to 17,000 francs.	Prices of items like fish, vegetables, meat etc. are collected the first fortnight of each month from 6 important markets, and other items during the second fortnight. Rent is not included as an index item.

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd.)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
EAST AFRICA											
29. Botswana	Cost of Living Index	The index covers the low, middle and high income groups of the population in the four urban areas and six semi urban large villages.	Monthly	Price data is collected from 110 retail outlets in the urban and semi urban centres.	Direct personal interview method is used.	March 1974=100	None	Food - 30 items Other- 48 items	$\frac{\sum \frac{P_{1i}}{P_{oj}} W_{oj} \times 100}{\sum W_{oj}}$	The weights were obtained from the 1968-70 Household Expenditure surveys conducted in 3 urban areas and 2 large villages.	When an item disappears from the market, it is omitted from the index without any adjustments. Steps are being taken to try and revise the system in 1979 and new weights will be introduced then.
30. Djibouti	Evolution of cost of living index in Djibouti	The index is only for the expatriate population in the city of Djibouti.	Quarterly	Data is collected from various trading establishments in the city of Djibouti.	For the big establishments mail questionnaire method is used, but for local markets and small shops personal interview method is used.	July 1969=100	None	Food - 85 items Other- 46 items	Laspeyres	Weights were derived from the household budget survey conducted in 1969.	Rent is included as an index item. The price of any seasonal item obtained at the last collection period is maintained during the off-season period until the item is available again. Commodity items are defined by weight, packing, trade mark etc.
31. Ethiopia	Addis Ababa Retail Price Index	All households whose monthly income is Birr 400 or less in Addis Ababa.	Monthly	City was divided into 4 marketing zones for data collection.	Direct personal interview	1963=100		Food- 33 items Others- 40 items	Laspeyres $\frac{\sum P_n Q_o}{\sum P_o Q_o}$	From the 1963 family budget survey, expenditure on each consumption component was determined and items were then selected from each major group proportional to their value. Such items were assumed to represent the relative prices for their group for the base year.	The number of data or commodities collected from each zone is proportional to the size of the zone, i.e. the number of shops available in that zone. Method of selecting establishments is purposive.
32. Kenya	Consumer Price Index - Nairobi	For the lower income group it covers households earning 0 to 699/- per month, middle income group- 700/- to 2 499/- per month and upper income group- 2 500/- and over per month.	Monthly	Data is collected from 50 establishments.	Mostly direct personal interview, but for food items direct purchasing method is employed.	January-June 1975=100	Prior to the present base period, August 1971 was the base period.	Low income group - 119 items middle income group- 191 items upper income group- 219 items	Laspeyres $\sum \frac{P_{1i}}{P_{oi}} \times W_i \times 100$ where $W_i = \frac{P_{oi} Q_{oi}}{P_{oi} Q_{oi}}$ P_{1i} = current price of commodity i P_{oi} = base price of commodity i Q_{oi} = quantity of commodity i. in base year	The weights used were based on the household expenditure survey conducted from August to December 1974 in Nairobi.	The prices are collected by the clerical officers during the first 4 days of each month and mid month for a period of one week. Prices on rents collected once in 6 months. The index covers all income groups- lower, middle and upper income groups of Nairobi city. Prices are collected from 3 markets, 8 groceries, 6 pharmaceutical stores, 5 butcheries, 6 vegetable stores, 4 transport enterprises, 10 clothing and footwear retail stores, 4 household goods stores and 4 hospitals.
33. Lesotho	Retail Price Indices for Lesotho Towns.	The index covers all urban households for 6 lowland towns of Lesotho including the capital Maseru.	Quarterly	Prices of commodities are collected from 307 retail and service establishments. Rent quotations are obtained from 26 private and 230 Government owned dwellings.	Direct personal interview method is used.	October 1972=100	None	Food- 47 items Other- 63 items	Laspeyres	The weights used were obtained from the 1972/73 household budget survey.	Prices are collected quarterly for the month of January, April, July and November from the 6 lowland towns. Basically there are three indices that are calculated:- (a) an index of the low income group which reflects changes in the cost of living facing all urban households whose total annual income is less than R500; (b) an index for the middle income households and (c) the Maseru index on the average expenditure pattern of all Maseru households, mainly affecting the middle and high income groups.

AFRICA NUMBERS AND PRICE STATISTICS

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/commodities	Formulae used	Type of weights used	Remarks/notes
EAST AFRICA (cont'd)											
34. Madagascar	Retail Consumer Price Index for Tananarive	(a) The index for the Malagasy embraces the three groups, namely low income, middle income and high income groups. (b) The second index is for European in Tananarive.	Monthly Monthly	For Malagasy index, data is collected from 50 shops and groceries in the centre of town and also in the shops located in the densely populated areas. For the European index, prices are collected from 40 shops and groceries in the city centre.	For commodities that need to be weighed, items are purchased six times a month after every five days. For the rent, a questionnaire is given to the shopkeepers on the 20th day of each month and collected a week later.	August'71-July '72 =100	Original base was May-June 1961; no revision till the present	Malagasy: Food- 60 items; Others- 71 items European: Food- 116 items; Others- 94 items	$\frac{\sum P_n q_o \frac{P_n}{P_o}}{\sum P_o q_o}$ Laspeyres	For the two indices, weights were derived from the household expenditure survey conducted between April 1966 to March 1967.	Rent is not included as an index item. Prices of seasonal items like fruits and vegetables are collected 5 days a week, rotating the days every week; i.e. the first week starting with Monday for 5 days, the second week starting with Tuesday for 5 days etc.
35. Malawi	(a) Blantyre Price Indices (b) Lilongwe Price Indices	The indices cover the low and high income groups of the two largest towns - Blantyre and Lilongwe.	Low income group - monthly High income group - quarterly	Prices are collected from both small retail shops and department stores in Blantyre and Lilongwe. Prices of certain commodities are obtained from two markets in each town.	Direct personal interview in the case of shops and stores and direct purchasing from establishments in the case of markets. The cost of domestic service is determined by means of an annual postal survey to a sample of families in low density housing areas.	The Blantyre series 1971=100 The Lilongwe series: July 1974 =100.	Prior to the present, the base for low income group was 1965/66 and for the high income group was 1960.	Low income group: food- 77 items; other- 69 items High income group: food- 75 items; other- 154 items	Laspeyres	The weights were derived from the 1968/69 family expenditure survey. Both price and quantity weights are used in different parts of the indices.	For low income series, prices are collected about the 15th of each month from retail outlets and three times each month from markets. Prices for the high income group and collected once per quarter from all outlets. The low income household is one with an annual income of less than K600 in the 1968/69 family expenditure survey, while the high income household is one with an annual income of over K2 000 (kwacha) in the same year.
36. Mauritius	Mauritius Consumer Price Index	It covers all the families in the island (except Rodrigues district) with a monthly income not exceeding 2 000 rupees.	Monthly	Prices of items are collected from 5 markets and 126 other outlets. Rent is collected from about 200 dwellings.	Direct personal interview method used.	January-June 1976=100	1962	Food: 88 items Others: 145 items	Laspeyres	The weights were obtained from the results of the 1975 family budget enquiry among households whose monthly income did not exceed Rs 2 000.	Prices for vegetables, fruits fresh meat and fish are collected from 5 markets each week. Other goods and services are priced between the 12th and 18th each month. Annually there is an ad hoc survey on rent data. Seasonal items are included in the index calculations for the months they are available, when not available their weights are distributed among other items in the group.
37. Mozambique	Consumer Price Index	It covers the city of Maputo	Monthly	Data is collected from retail outlets and service establishments.	Direct personal interview method used.	1956-1957 = 100 (1 Oct.- 30 Sept.)		Food: 108 items Others: 82 items	Laspeyres	Weights were derived from a family expenditure survey conducted among 170 families between 1st October 1956 to 30 September 1957 in Maputo.	Prices are collected by agents the last 2 working days of a month from retail outlets and service establishments. No account is taken of seasonal fluctuations in item prices. The same type of index is calculated for Beira with base as 1959.
38. Seychelles	Victoria Retail Price Index	The index covers all the population groups of Victoria.	Monthly	Data is collected from 9 retail shops and 60 rented houses	A questionnaire is sent monthly to the retail shops. Data on rent is collected by interview from a number of rented houses that are sampled each month. Plan-brought daily vegetables weekly	January 1974=100	None	Food: 39 items Others: 37 items	Laspeyres	The weights were derived from a small survey of household expenditure conducted early in 1974.	The criterion used in determining the inclusion of a commodity in the index is taking into account the brand of a product that is commonly used. If an item disappears from the market, a substitute usually of similar type is taken.

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
EAST AFRICA (cont'd)											
39. Swaziland	Retail Price Index "B" for Mbabane & Mansini	The index covers the low income group of Mbabane & Mansini towns.	Monthly	Quotations obtained from markets, retail shops and institutions like hospitals.	For retail prices and services in institutions, personal interview method used in the case of fruits and vegetables direct purchasing from markets used.	January 1978=100	Prior to present weight base was January 1967.	Food, drinks and tobacco- 27 items others- 21 items	Laspeyres	Weights are based on the consumption behaviour of low income groups in Kenya, Rhodesia and South Africa.	
40. Somalia	Cost of Living Index	It covers households of 4 or more persons with an income of 100 to 800 shillings per month in Mogadiscio at the time of the survey.	Monthly	Price data are collected from markets and shops in Mogadiscio	Direct personal interview method used.	1966=100	1950	Food- 24 items Others- 37 items	Laspeyres	Weights were obtained from a family expenditure survey conducted in 1966 in Mogadiscio among 415 households of 4 or more persons with a monthly income between 100 and 800 shillings.	From the markets, prices are collected daily, from retail shops weekly. Rent quotations are obtained by means of an inquiry undertaken every 3 months among 3 types of dwelling units.
41. Tanzania	A. Retail Price Index of goods consumed by wage earners- Dar-es-Salaam	It covers the lower income group of Dar-es-Salaam only.	The index is compiled for the months of January March, May, June, July, September November & December	Data is collected from 4 markets and as many shops and stores as possible from the four areas of town.	Direct personal interview and purchasing from establishments are both used.	1969=100	Prior to 1969, data was collected for the wage earners index but no index was ever calculated.	Food- 19 items Other- 22 items	Laspeyres $\frac{\sum p_n q_o}{\sum p_o q_o} \times 100$	In 1969 a household budget survey was conducted and the weights used in the index calculated.	From 1951 price collections were carried out for the towns of Tanga and Mwanza but since the data was poor and not continuous, no index was calculated by the Bureau. In 1969 the system was reorganised, starting with a household budget survey that year, but only for the city of Dar-es-Salaam. Prices are collected and indices compiled for the months of January, March, May, June, July, September, November and December. These prices are collected from markets and any shop or store where the commodities are available.
	B. Cost of Living Index for middle income group in Dar-es-Salaam	The index covers the middle income group of Dar-es-Salaam only, mainly civil servants.	Quarterly	Data is collected from 4 markets and as many shops and stores as possible from the four areas of town.	Direct personal interview.	1969=100	None	Food- 39 items Other- 51 items	Laspeyres	In 1969 a household budget survey was conducted and the weights used for the index calculated.	
	C. Dar-es-Salaam High Income Index.	Covers the high income group of Dar-es-Salaam.	Semi-Annually (June and December)	Data is collected from 4 markets and as many shops and stores as possible from the four areas of town.	Mail questionnaire and direct personal interview methods are used.	1969=100	-	Food- 72 items Other- 222 items	Laspeyres	In 1969 a household budget survey was conducted and the weights used for the index calculated.	
	D. National Consumer Price Index.	The index is of national coverage, with prices from regional centres of the Tanzania mainland.	Quarterly	Data is collected from markets, as many stores and shops as may be covered, depending on the availability of required commodities in these outlets.	Mail questionnaires, direct interviews and direct purchasing from establishments.	1969=100	-	Food- 21 items Other- 93 items	Laspeyres	In 1969 a household budget survey was conducted and the weights used for the index calculated.	In calculating the national index, first average prices for each item and for each town are calculated. Then an overall weighted average price for each item for the whole country is worked out. Using this average price, price relatives are worked out, based on the base period prices for the same items, then the index calculated.

INDEX NUMBERS AND PRICE STATISTICS

C. Retail Prices and Consumer Price or Cost of Living Indexes (cont'd)

Sub-region and country	Official title of the index	Scope of the index	Frequency of the index	Sources of data and number of establishments/units	Method of price collection	Base Period	Revision of weight base	Number of items/ commodities	Formulae used	Type of weights used	Remarks/notes
EAST AFRICA (cont'd)											
42. Uganda	Kampala Cost of Living Index	(a) It covers the low income group earning about Sh. 150 p.m. in 1964	Monthly	Originally data was collected from 60 outlets but the number of these outlets has gone down due to the disappearance of many commodities in the city	Direct purchasing from the markets and personal interview methods used.	January 1961=100		Low income group: Foods: 18 items Others: 19 items	Laspeyres	The weights were derived from a family expenditure survey conducted in 1964 among unskilled workers.	Rent is not included as an index item, nor is it taken into account in determining the weights. Prices are obtained through direct buying by agents on the second Friday of each month in the 10 African markets of Kampala. No account is taken of seasonal fluctuations in item prices.
		(b) The index covers the middle income group earning about Sh. 11,000 p.a. in 1963.	Monthly	- ditto -	Personal interview method used.	January 1961=100		Middle income group Foods: 23 item Others: 44 item	Laspeyres	The weights were derived from a family expenditure survey conducted in 1963 among middle level employees.	Rent is also not included as an index item. Agents collect prices from markets and retail shops each month.
		(c) The index covers the high income group earning about Sh. 27,000 p.a. in 1963.	Monthly	- ditto -	Mail Questionnaire method used.	January 1961=100		High income group Foods: 49 items Others: 100 items	Laspeyres	The weights were derived from a family expenditure survey conducted in 1963 in Entebbe and Kampala among families of senior civil servants.	Similary, rent is not included as an index item. Prices are collected by means of a mail questionnaire on the second Tuesday of each month. No account is taken of seasonal fluctuations in item prices.
43. Zambia	Index numbers of Consumer Prices.	The index covers the low and the high income groups in the ten principle towns of Lusaka, Kitwe, Ndola, Chingola, Mufulira, Kabwe, Livingstone, Chililabombwe and Kafulushi, Luanshya.	Monthly	Price Quotations are collected from selected retail outlets-shops, supermarkets, township markets	Mail Questionnaire method is used for retail shops and supermarkets and direct purchasing from township markets.	1975=100	Prior to the present, weight base was 1969.	Over 500 items	Laspeyres	The weights for both the low and the high income groups were derived from the household budget survey conducted in 1974/1975.	Questionnaires are sent by mail each month to the selected retailers in the 10 principle towns to record the cash prices they charge on the 10th day of the month and return them as soon as possible after that day. Direct purchasing from township markets is done by agents for certain commodities. Seasonal price fluctuations are accounted for by omitting such items from the calculation of the index and their weights re-allocated proportionally amongst the other items in the same sub-group.

ANNEX II

WEIGHTS AND COMPOSITION OF INDEXES

A. Index numbers of Production

Sub-region and country	Group	Number of items	Weighting Coefficients	Geographical coverage and notes
North Africa				
1. Algeria	Water and energy		51.2	It excludes the extraction of crude petroleum and natural gas but includes petroleum refining magnetise products.
	Mining and quarrying		35.5	
	Metalic products and electrical machinery		22.1	
	Non-metalic products		45.0	
	Chemicals, petroleum, rubber and plastic produdts		58.4	
	Food products		598.5	
	Textiles		114.6	
	Leather		30.0	
	Wool, paper and printing		40.1	
	Others		4.6	
			1000.0	
2. Morocco	Mining	15		The index covers establishments employing 10 or more persons. Taxes are not included in the prices.
	Manufacturing	140		
	Food	(31)		
	Textiles and clothing	(8)		
	Heavy manufacturing industries	(41)		
	Other manufacturing industries	(60)		
	Energy	14		
		169		

ANNEX II (cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

A. Index numbers of Production

Sub-region and country	Group	Number of items	Weighting Coefficients	Geographical coverage and notes
West Africa				
3. Ghana	Mining		42.4	It is a country wide index and excludes African diamond diggers, stone quarrying, raw gin production and motor repair shops.
	Manufacturing		50.5	
	Electricity		7.1	
			100.0	
4. Nigeria				Covers the whole country
	Mining		435.8	
	Tin ore		(36.7)	
	Coal		(7.8)	
	Columbite		(3.9)	
	Natural gas		(1.9)	
	Lime stone		(3.9)	
	Petroleum		(381.6)	
	Manufacturing		512.6	
	Aerated waters (soft drinks)		(5.8)	
	Beer		(72.8)	
	Cement		(31.5)	
	Cigarettes		(76.1)	
	Cotton textiles		(47.7)	
	Footwear		(5.1)	
	Paints and allied products		(4.5)	
	Radios, TV assembly, etc.		(4.5)	
	Roofing sheets		(6.4)	
	Rubber		(31.5)	
	Soap and detergents		(38.0)	
	Sugar & confectionery		(5.1)	
	Tin metal		(3.2)	
	Vegetable oil		(31.5)	
	Vehicle assembly		(10.9)	
	Others		(138.0)	
	Electricity		51.6	
			1000.0	

ANNEX II (cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

A. Index numbers of Production

Sub-region and country	Group	Number of items	Weighting Coefficients	Geographical coverage and notes
5. Senegal	Mining	1	1.5	
	Manufacturing	36	84.7	
	grains, flour and buiscuits	(5)	(6.3)	
	drinks, confectionery, sugar	(7)	(4.8)	
	preserves	(1)	(1.0)	
	tobacco and matches	(2)	(13.0)	
	oils	(1)	(35.6)	
	textiles	(7)	(6.4)	
	shoes	(2)	(3.6)	
	chemicals	(5)	(4.5)	
	non-metallic mineral products	(2)	(5.7)	
	miscellaneous products	(4)	(3.8)	
	Electricity	1	13.8	
		38	100.0	
East Africa				
6. Kenya	Mining and quarrying	12		The index covers the whole country, the section on manufacturing covers Nairobi only.
	Manufacturing	196		
	Construction	73		
		281		
7. Zambia	Mining		72.7	It is on index of national coverage, in principles embracing all industrial activities
	coal		(0.9)	
	non-ferrous ore (including copper refining)		(71.5)	
	stone quarrying		(0.3)	
	Manufacturing		23.7	
	food, beverages and tobacco		(7.3)	
	textiles and clothing		(2.8)	
	wood and wood products		(0.9)	
	paper and paper products		(1.2)	
	chemicals, rubber and plastic products		(4.4)	
	non-metallic mineral products		(1.6)	
	basic metal industries (excluding copper refining		(0.3)	
	metal products and other industries		(5.0)	
	Electricity		3.5	
			100.0	

ANNEX II (Cont'd)

WEIGHTS AND COMPOSITION OF INDICES

B. Index Numbers of Wholesale Prices

Sub-Region & Country	Group	Number of items	Percentage Weight	Geographical coverage & notes
North Africa				
1. Egypt	(a) According to S.A.C.E.A.			
	Agricultural crops	79	27.6	The index is calculated according to the Standard Arab Classification of Economic Activities and further classified according to end use and stage of processing
	Poultry and fish	9	3.4	
	Inedible animal products	15	0.8	
	Foodstuffs and beverages	44	19.9	
	Tobacco and its manufactures	6	7.1	
	Yarn, textiles & undergarments	79	20.5	
	Tanned skins	10	0.4	
	Household appliances	20	1.2	
	Petroleum and fuel	17	7.4	
	Paper	11	1.1	
	Wood	18	1.1	
	Construction materials	35	2.6	
	Medicines	35	1.6	
	Chemical materials	28	2.9	
	Metals and their manufactures	13	1.0	
	Machinery and implements	4	0.4	
	Transportation equipments	15	1.0	
		440	100.0	
	(b) by end use			
	Fuel	15	7.1	
	Raw materials	69	10.8	
	Intermediate goods	113	16.2	
	Non durable goods	211	63.3	
	Durable goods	31	1.7	
	Capital goods	8	0.9	
	(c) by stage of processing			
	Fuel	15	7.1	
	Cotton	24	8.3	
	Raw materials	112	33.1	
	Semi finished goods	47	10.1	
	Finished goods	242	41.3	
2. Morocco	Agriculture (forestry & fishing)	77		The index covers the 9 big representative cities of the country
	Manufacturing & energy			
	Energy	10		
	Food items	37		
	Textiles and clothing	10		
	Metallic products	39		
	Other manufacturing products	58		
		231		
3. Sudan	Food beverages & tobacco	20	31.6	For 20 items f.o.b. prices are used including export duties and taxes. For 14 items valuations are at auction market prices excluding taxes; and the 4 items and valued at c.i.f. prices excluding import duties and internal taxes
	Industrial raw materials	15	46.7	
	Textile goods	1	3.8	
	Chemicals	1	17.4	
	Kerosene	1	0.5	
		38	100.0	
		Local / Imported		
4. Tunisia	Food products	62 / 17		Prices refer to sale quotations of wholesalers and producers; and for imported and exported goods c.i.f. and f.o.b. prices are used respectively.
	Industrial products	118 / 37		
	Energy products	13 / 2		
	Raw materials other than food	8 / 6		
		203 / 62		
West Africa				
5. Ghana	Local food	19	25.9	The group "Exports of domestic produce" includes main items of exports e.g. cocoa, timber, diamonds, bauxite and manganese.
	Imported food	13	7.7	
	Drink and tobacco	7	3.9	
	Fuel and electricity	6	2.1	
	Chemicals and vegetable oils	16	3.1	
	Manufactured articles	35	17.9	
	Machinery and transport equipment	10	9.6	
	Exports of domestic produce	9	29.8	
		114	100.0	
6. Ivory Coast	Cement		27.3	No general index of wholesale prices is compiled, the information here relates to the index of building materials.
	Asbestos		4.6	
	Lime and sand		1.0	
	Wood		9.1	
	Steel products		42.1	
	Lead products		0.3	
	Copper products		1.3	
	Zinc plate		0.1	Tiles with a weight of 5.4% are not included in the index
	Asphalt		1.3	
	Plaster		2.0	
	Linseed oil		2.3	
	Glass		2.6	
	Explosives		0.6	
			94.6	

ANNEX II (Cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

B. Index Number of Wholesale Prices

Sub-Region & Country	Group	Number of items	Percentage Weight	Geographical coverage & notes
West Africa (Cont'd)				
7. Senegal	cement	2	27.3	No general index of wholesale prices is compiled, the information here relates to the index of building materials.
	Asbestos	1	4.6	
	Tiles	1	5.4	
	Lime and sand	2	1.0	
	Wood	4	9.1	
	Steel products	5	42.1	
	Lead "	2	0.3	
	Copper "	2	1.3	
	Zinc plate	1	0.1	
	Asphalt	1	1.3	
	Plaster	1	2.0	
	Linseed oil	1	2.3	
	Glass	1	2.6	
	Explosives	1	0.6	
		25	100.0	
Central Africa				
8. Central African Empire	Food	17	1.69	Covers the city of Bangui only
	Energy	3	0.11	
	Industry	11	98.20	
		31	100.00	
9. Gabon	Food products and tobacco	23	20.8	Weights are based on the volume of wholesale transactions excluding exports. Prices include indirect taxes, for imports c.i.f. prices are used
	Energy: combustible & water	10	12.5	
	Industrial products	80	66.7	
		113	100.0	
10. Rwanda	Food	8	..	No weights are used in the calculation of the index. Only Kigali city is covered by the index.
	Clothing	5	..	
	Energy	4	..	
	Building materials	12	..	
	Miscellaneous	7	..	
		36	..	
East Africa				
11. Ethiopia	Imports			
	Food	25		No general index is compiled, the only index compiled is on exported and imported goods
	Chemicals	33		
	Textiles	14		
	Transport equipment	35		
	Miscellaneous	77		
		184		
	Exports			
	Coffee	4		
	Pulses	4		
	Oilseeds	5		
	Oil cakes	5		
	Hides and skins	6		
	Miscellaneous	4		
		28		
12. Zambia	1. Building materials			
	Bricks	4	9.42	
	Cement	1	9.74	
	Timber, wood and pulp products	6	17.33	
	Quarry and sand pits products	6	7.5	
	Other chemical products	11	5.55	
	Other non-metalic mineral products	12	11.18	
	Paint and allied products	7	4.05	
	Metal products	35	24.77	
	Electrical materials	17	10.41	
		111	100.00	
	2. Other			
	Agriculture, forestry & fishing		8.2	
	Agriculture		(6.7)	
	Forestry		(0.7)	
	Fishing		(0.8)	
	Mining and Quarrying		45.9	
	Copper mining		(42.8)	
	Other metallic mining		(2.3)	
	Other mining and quarrying		(0.8)	
	Manufacturing		44.3	
	Food, beverages and tobacco		(8.0)	
	Textiles and leather products		(6.0)	
	Wood products and furniture		(1.0)	
	Paper and paper products		(0.7)	
	Chemical and Chemical products		(5.3)	
	Non metallic mineral "		(4.5)	
	Basic metal industries		(1.6)	
	Metallic products		(20.2)	
	Electricity		1.6	
	All commodities excluding copper		57.2	
			100.0	

ANNEX II (cont'd)
WEIGHTS AND COMPOSITION OF INDEXES
C. Consumer Price Indexes

Sub-region and country	Group	Number of items/series	Percentage weights	Geographical coverage and notes
North Africa				
1. Algeria	Food	•	520	It covers the city of Algiers and suburbs
	Housing			
	fuel, light and water	•	40	
	rent	•	90	
	Clothing and household linen	•	65	
	Furniture and household equipment	•	30	
	Cleaning, personal and medical care	•	120	
	Transport	•	55	
	Miscellaneous and entertainment	•	80	
		167	1000	
2. Egypt	Food	81	50.6	There are two indices. The urban index covers the capitals of each governorate while the rural index is the average of 3 localities in the governorate
	Housing			
	rent	1	11.2	
	fuel and light	5	3.4	
	cleaning materials	9	1.3	
	Clothing	58	7.7	
	Furnishings	29	1.1	
	Transport and communications	9	5.7	
	Services	30	11.3	
	Personal expenses	23	7.7	
		245	100.0	
3. Libya	Food and tobacco	167	37.2	Index covers the city of Tripoli only.
	Housing	60	32.2	
	Clothing	107	6.9	
	Transport	•	9.4	
	Personal and medical care	•	5.8	
	Education and recreation	•	8.5	
		434	100.0	

ANNEX II (cont'd)
WEIGHTS AND COMPOSITION OF INDEXES
C. CONSUMER PRICE INDEXES

Sub-region and country	Group	Number of items/series		Percentage weights		Geographical coverage and notes
North Africa (cont'd)						
4. Morocco	Food	82		82		Covers 3 big cities and refers to the middle income group
	Housing	45		45		
	Clothing and household linen	34				
	Maintenance, personal and medical care	19				
	Transport, recreation and miscellaneous	30				
		210				
		Low	High	Low	High	
5. Sudan	Food and tobacco	31	45	66.5	.	Low income group is for Africans and high income group for expatriates in Greater Khartoum only.
	Housing (rent light, water)	5	6	12.4	.	
	Clothing and footwear	22	27	5.9	.	
	Miscellaneous	12	19	15.2	.	
		70	97	100.0	.	
6. Tunisia	Food	191		51.0		Index covers 12 main cities of Tunisia.
	Housing	69		18.0		
	Clothing	112		12.0		
	Personal care and hygiene	87		6.2		
	Transport and communications	36		4.6		
	Recreation and miscellaneous	72		8.2		
		567		100.0		

ANNEX II (cont'd)
WEIGHTS AND COMPOSITION OF INDEXES
C. Consumer Price Indexes

Sub-region and country	Group	Number of items/series	Percentage weights	Geographical coverage and notes
West Africa				
7. Cape Verde	Food			
	animal origin	23	.	The index is for the
	vegetable origin	31	.	capital - Praia
	Fuel, light, water and soap	7	.	
		61	.	
8. Gambia	Food and drinks	52	61.0	Covers the low income
	Housing	1	5.0	group of Banjul and
	Fuel and light, rent	5	16.0	other towns
	Clothing, textiles and footwear	21	8.0	
	Miscellaneous	30	10.0	
		109	100.0	
9. Ghana	Food - local	47	458.9	Covers the low income
	- imported	14	39.1	group in Accra only.
	Drinks and tobacco	9	49.4	
	Rent	7	95.7	
	Fuel and light	5	43.3	
	Clothing	38	120.3	
	Durable goods	12	12.1	
	Health and hygiene	7	30.3	
	Transport and communications	4	78.2	
	Miscellaneous	10	72.7	
		153	1000.0	

ANNEX II (cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

C. Consumer Price Indexes

Sub-region and country	Group	Number of items/series	Percentage weights	Geographical coverage and notes
WEST AFRICA (cont'd)				
10. Ivory Coast	Food	47	51.1	Covers the city of Abidjan only.
	Rent	2	11.6	
	Fuel, light, water and soap	6	8.1	
	Clothing	12	8.4	
	Household goods	13	7.3	
	Services	9	8.5	
	Miscellaneous	11	5.0	
		100	100.0	
11. Liberia	Food	32	34.4	
	Drinks and tobacco	6	5.7	
	Fuel and light	3	5.0	
	Rent	1	14.9	
	Clothing	14	13.8	
	Household goods and furniture	7	6.1	
	Health, personal care and services	9	11.4	
	Miscellaneous	7	8.7	
		79	100.0	
12. Mali	Food			
	Flour and starchy foods	4	33.9	For the unskilled workers in Bamako
	Spices and herbs	5	8.0	
	Fresh fruits and vegetables	5	9.1	
	Meat and fish	5	38.1	
	Milk, fats and miscellaneous	5	10.9	
		24	100.0	

ANNEX II (cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

C. Consumer Price Indexes

Sub-region and country	Group	Number of items		Percentage weights		Geographical coverage and notes
WEST AFRICA (cont'd)						
13. Mauritania	Food	74		41.0		
	Fuel, light, water and cleaning	8		17.3		
	Clothing	4		5.2		Covers Europeans in Nouakchott, the capital.
	Domestic services	1		11.7		
	Miscellaneous	24		24.8		
		111		100.0		
		Africans	Europeans	Africans	Europeans	
14. Niger	Food	25	45	45	46.1	Covers the capital Niamey only.
	Cleaning materials		10		4.3	
	Water, gas and electricity		3		11.1	
	Rent	7	1	18		
	Durable goods	4				
	Clothing	10	12	10	6.0	
	Domestic services		2		8.2	
	Miscellaneous	15	27	27	24.1	
		61	99	100	100.0	
15. Nigeria	Food	46		42.7		
	Drinks	8		7.5		Covers the lower income group in Lagos only.
	Tobacco and kola	6		3.7		
	Accommodation					
	rent	1		12.2		
	maintenance and repairs	2		0.6		
	Fuel and light	6		3.1		
	Clothing	28		9.9		
	Household goods	13		2.0		
	Miscellaneous, personal expenditure	26		4.0		
	Transport	10		7.2		
	Other services	12		1.1		
		157		100.0		
		Africans	Europeans	Africans	Europeans	
16. Senegal	Food	71	86	56.0	45.0	Covers the city of Dakar only
	Gas, electricity and telephones		6		4.3	
	Clothing	22		11.9		
	Housing and domestic services	17	2	16.2	4.6	
	Maintenance and hygiene	14	57	4.0	34.5	
	Transport, entertainment and recreation	27	10	11.9	19.6	
	Miscellaneous		6		4.0	
		151	181	100.0	100.0	
17. Sierra Leone	Food	34		58.8		Covers low income group in Freetown
	Housing					
	rent and rates	2		12.4		
	fuel and light	3		7.6		
	furniture and household goods	10		2.3		
	house repairs	2		0.5		
	Clothing	16		7.4		
	Miscellaneous	25		11.0		
		92		100.0		
		Africans	Expatriate	Africans	Expatriate	
18. Togo	Food	53	41	47.9	...	Covers the city of Lome only.
	Alcoholic beverages, tobacco and kola	12	8	10.6	...	
	Fuel, water and light	6		5.3		
	Household equipment and cleaning materials	13		4.8		
	Housing					
	rent	1	11	7.9	...	
	repairs	7	22	3.9	...	
	Clothing	26	12	7.7	...	
	Transport	4	3	3.5	...	
	Services	9		3.4		
	Miscellaneous	10	12	12.1	...	
		141	109	100.0	...	

ANNEX II (cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

(c) Consumer Price Indexes

Sub-region and country	Group	Number of items		Percentage weights		Geographical coverage and notes
CENTRAL AFRICA						
19. Angola	Food					
	animal origin	17		.		Covers the middle-class population of Luanda city.
	vegetable origin	13		.		
	Fuel, light, water and soap	7		.		
		37		.		
20. Burundi	Food	25		59.6		
	Household operations					
	rent	1		4.4		Covers the capital Bujumbura
	fuel, light and water	4		5.8		
	domestic services and household goods	5		6.0		
	Clothing	8		11.1		
	Miscellaneous (including wage tax)	6		13.1		
		53		100.0		
21. Cameroun		Africans	Expatriates	Africans	Expatriates	
	Food	50	50	336	373	The index for Africans covers the middle income group in Yaounde and the expatriates index in Douala.
	Beverages and tobacco	11	13	103	133	
	Household operations	23	13	146	193	
	Clothing	13	6	163	36	
	Transport	8	7	105	65	
	Personal and medical care	13	9	50	59	
	Recreation	4	5	51	35	
	Services and miscellaneous	10	10	46	106	
		132	113	1000	1000	
22. Central African Empire	Food	45		58		The index covers technical assistance officials in Bangui.
	Fuel, electricity, water and cleaning	7		8		
	Clothing and household linen	7		8		
	Domestic services	4		11		
	Miscellaneous	26		15		
		89		100		
23. Chad		Imported Prod.	Local product			
	Food and beverages	58	22			
	Industrial products		1			
	textiles and leather	9				
	mechanical and electrical products	6				
	chemical and pharmaceutical products	16				
	other	13				
	Tobacco and cigarettes		1			
	Electricity and water		3			
	Services		9			
		102	36			
24. Congo		Africans	Expatriates	Africans	Expatriates	
	Food	100	73	.	51.0	
	Electricity, gas and water	8	3	.	5.4	Covers African and Expatriates families in Brazzaville.
	Clothing and household linen	16	14	.	8.2	
	Industrial products	13		.		
	Household expenditure	14	23	.		
	Personal and medical care	22	5	.	13.6	
	Services	25		.	2.6	
	Miscellaneous	10	20	.		
		208	138	.	13.2	
					100.0	
25. Gabon	Food	35	-	65.0		Covers the city of Libreville only.
	Housing					
	Building materials	2		4.1		
	Fuel	2		2.5		
	Clothing and household linen	10		16.3		
	Miscellaneous	16		12.1		
		65		100.0		
26. Rwanda	Food	42		..		Covers the city of Kigali only.
	Non-food	36		..		
		78		..		
27. Zaire	Food	36		368		
	Fuel, light and water	4		32		
	Clothing	7		439		
	Household equipment and personal care	6		62		
	Transport and entertainment	4		99		
		57		1000		

ANNEX II (Cont'd)

WEIGHTS AND COMPOSITION OF INDEX

C. Consumer Price Indexes

Sub-region and Country	Group	Number of items			Percentage weights			Geographical coverage and notes
East Africa								
8. Djibouti	Food		85			49.0		Covers the expatriate population of Djibouti
	Water gas & electricity		3			15.5		
	Clothing		12			3.1		
	Transport		11			6.4		
	Domestic services		2			14.3		
	Maintenance		2			6.3		
	Pharmaceutical goods		16			5.4		
			131			100.0		
9. Ethiopia	Food, drinks and tobacco		33			49.0		Covers the city of Addis Ababa
	Household items		7			29.2		
	Clothing		6			6.7		
	Transportation		3			4.5		
	Personal care		3			2.6		
	Medical care		7			2.6		
	Reading and recreation		5					
	Other goods and services		9			5.4		
			73			100.0		
10. Kenya		L	M	H	L	M	H	Covers the city of Nairobi only.
	Food	37	62	91	41.0	35.6	25.0	
	Drinks and tobacco	6	13	13	4.4	4.4	2.3	
	Clothing and footwear	23	24	29	9.9	11.9	4.6	
	Housing, fuel and power	5	7	7	26.6	20.4	31.9	
	Household equipment & operations	21	36	34	6.1	8.1	6.5	
	Health and personal care	7	12	10	1.6	2.4	2.9	
	Transport and communications	8	13	14	3.8	7.9	14.3	
	Recreation, education & cultural services	8	14	15	4.1	4.5	5.6	
	Miscellaneous goods & services	4	8	8	2.5	4.0	4.9	
		119	191	219	100.0	100.0	100.0	
11. Madagascar		Madagascars		Expatriates	Madagascars		Expatriates	
	Food	60		105	56.2		46.1	Cover the capital Tananarive
	Fuel and light	9		5	9.2		7.4	
	Domestic services	1		3	2.1		5.0	
	Entertainment and recreation	43		61	23.0		28.4	
	Miscellaneous	19		25	9.5		10.1	
		131		199	100.0		100.0	
12. Mauritius	Food, beverages and tobacco		88			50.9		Covers both the urban and rural areas of the country
	Housing		29			4.1		
	Fuel and light		5			14.1		
	Clothing		41			11.8		
	Miscellaneous		70			19.1		
			233			100.0		
13. Seychelles	Food		39					Covers the town of Victoria
	Others		37					
			76					
14. Somalia	Food		24			61		For the low income group in Mogadicio
	Fuel and light		3			4		
	Rent and water		2			15		
	Clothing		14			4		
	Miscellaneous		13			16		
			61			100		
15. Tanzania		L	M	H	L	M	H	
	Food	19	17		77	.		National index covers provincial towns of Tanzania. While the wage earners index covers Dar-es-Salaam only
	Drinks and tobacco	3	4		7	.		
	Rent		1			.		
	Fuel light and water	4	6		8	.		
	Clothing and footwear	9	25		6	.		
	Furniture and utensils	6	19		2	.		
	Household operations		11			.		
	Personal care and health		11			.		
	Recreation, entertainment & education		6			.		
	Transportation		12			.		
	Miscellaneous		2			.		
		41	114		100	.		
16. Uganda		L	M	H	L	M	H	Indices cover the city of Kampala only
	Food	18	23	49	70	41.7	25.4	
	Drink & tobacco	3	3	7	11	16.5	7.0	
	Fuel, and soap	3	3	.	6	4.3		
	Household goods	7	.	23	2		11.6	
	Clothing and footwear	6	15	15	9	10.6	7.2	
	Domestic services		1	2		3.8	7.5	
	Personal and medical care		10	9		13.6	2.2	
	Transport		2	10		8.3	14.9	
	Entertainment		.	14			4.2	
	Miscellaneous		3			1.2		
		37	67	149	100	100.0	100.0	

ANNEX II (Cont'd)

WEIGHTS AND COMPOSITION OF INDEXES

C. Consumer Price Indexes

Sub-region and Country	Group	Number of items		Percentage weights		Geographic coverage and notes
East Africa (Cont'd)						
37. Botswana	Food, beverages and tobacco	30		.		Covers 4 urban centres and 6 rural cities
	Clothing and footwear	10		.		
	Household effects fuel, water & electricity	21		.		
	Services and taxes	17		.		
		78		.		
38. Lesotho	Food and drink	47		.		Covers all urban households for the 6 lowland towns including Maseru
	Rent and home owner's costs	3		.		
	Fuel, light and heat	4		.		
	Furniture and household equipment	15		.		
	Clothing and footwear	15		.		
	Medical and personal care	7		.		
	Transport	7		.		
	Other goods and services	12		.		
		110		.		
		L	H	L	H	
39. Malawi	Food	27	70	47.9	23.3	Cover the towns of Limbe and Blantyre
	Beverages and tobacco	11	25	7.7	6.7	
	Clothing	22	32	17.6	5.8	
	Household goods and services	21	31	19.8	12.3	
	Domestic services	4	4	1.6	6.7	
	Transport and repairs	5	23	1.8	26.4	
	Miscellaneous	6	39	1.6	18.8	
		96	224	100.0	100.0	
40. Mozambique	Food	108		47.5		Covers the city of Maputo only
	Fuel and light	5		3.4		
	Rent	1		0.2		
	Clothing	20		1.5		
	Water and household cleaning goods	10		5.2		
	Miscellaneous	46		42.2		
		190		100.0		
41. Swaziland	Food	24				The low income group-wage earners in Mbabane and Whabane
	Drinks and tobacco	3				
	Clothing and textiles	9				
	Fuel light and water	4				
	Miscellaneous	8				
		48				
42. Zambia	Food, drink and tobacco					
	clothing and footwear			68.0		Covers urban household (low income group) in the towns of Twaata, Ndola, Kabwe, Kitwe, Livingstone and Luanshya
	Housing and fuel			9.9		
	Furniture and household goods			10.6		
	Medical care)			4.4		
	Transport and communication)			7.1		
	Recreation, entertainment etc.)					
	Other goods and services)					
		500		100.0		

Annex III

Staff involvement in price data collection and compilation in National Statistical Offices

Country	Professionals	Intermediate & middle level	Lower level	field workers	Total
Botswana	1	1	3	several	5+
Burundi	1		1	3	5
Cameroon	4	20			24
Chad		2		5	7
Congo		2	1	6	9
Djibouti				1	1
Ethiopia	4	3	7	several	14+
Gambia	1		2		3
Kenya	4	2	10		16
Lesotho	1	1	4	several	6+
Madagascar	1	2	1		4
Malawi	1	1	2	7	11
Mali	1	2		4	7
Mauritius	1	3			4
Morocco	3	13		54	70
Niger		3			3
Rwanda		2			2
Seychelles		1	1		2
Sudan	5	4			9
Swaziland		1	1	several	2+
Tanzania	1	2		several	3+
Togo				12	12
Tunisia	2	6		14	22
Uganda		3		several	3+
Zambia	6	10		several	16+
	37	84	33	106+	260

Date..... Country.....

U.N. Economic Commission for Africa

Inquiry on Index Numbers and Price Statistics

Notes:

1. In most of the questions, boxes ☐ are provided for you to place an "X" symbol against the answer that applies in your case. Please be specific under "other".

2. (a) Under question 2 of each section you might have compiled indices in more than one sector. If you have, please answer questions 3 through 17/18 for each of the indices compiled. Three extra copies of the questionnaire are enclosed for the purpose.

   (b) In the case where you have not compiled any index number in section A, i.e. at producer prices, skip to section B; similarly to section C if you haven't compiled any indices at wholesale prices.

3. At the end of most of the questions, spaces have been provided for you to supply answers and elaborate where necessary. Please be concise and precise in your explanations.

A. Producer Prices.

1. Has your country compiled any index number at producer prices?
   yes ☐ no ☐

2. If the answer to question 1 above is "yes", please state the sector(s) in which the index is compiled, e.g. agriculture, mining, manufacturing etc.

   _____

   _____

   _____

   _____

3. What is the official title of the index. _____

   _____

4. State the frequency at which you compile your inded:-

(a) annually ☐ (b) semi annually ☐

(c) quarterly ☐ (d) monthly ☐

(e) other ☐ _____

5. State the scope and coverage of the index:-

_____

_____

_____

_____

_____

_____

6. What agency or government department is responsible for the collection of the data _____

_____

State the number possibly the structure and qualifications of staff involved in the price statistics section of your agency or department; make special mention of the field arrangements you may have for the collection of price data. _____

_____

_____

_____

_____

_____

_____

7. State the sources from which you collect your information:-

(a) direct from formers, producers etc. ☐ or

(b) indirectly from

(i) wholesalers ☐ (ii) marketing boards ☐

(iii) cooperatives ☐ (iv) chamber of commerce ☐

(v) other ☐ _____

_____

_____

_____

_____

State the number of establishments or producers from which information is collected above. _____

_____

8. What is the method used in selecting the establishments or producers from which you collect your information under question 7.

(a) random ☐ (b) purposive ☐
(c) other ☐

9. What is the method of price collection :-

(a) mail questionnaire ☐
(b) direct personal interview ☐
(c) other ☐ _____

10. (a) What is the base period of the index? Also state how the base prices are determined.

(b) Were there any revisions of the weight base prior to the present?

11. Please state the main groups and against each group the total number of items or commodities on which the index is calculated.

12. Describe the method you use for pricing seasonal items and how such items are included in the index.

13. (a) What criterion do you use of selecting a commodity; i.e. by its end-use, function, quality, its importance in the consumption pattern; in order to include it in the index?

(b) What descriptions do you use in defining a product e.g. by size, weight, etc.

(c) What procedure do you follow when items of a given type / quality cease to be produced?

14. Please state the formula(e) you use in calculating the index.

15. (a) State the type of weights used in the calculation of the index and indicate the source of data from which these weights were derived.

(b) Outline steps or method followed in which individual quotations are combined into average prices or price relatives for each locality and by which average prices, price relatives or indices for individual localities are combined into an index for the country as a whole

16. What is the publication(s) in which the index number is regualrly published?

In the case where a detailed methodological anaysis regarding the index has been published please send us an extract or copy

17. Please provide any other information omitted that will be of some help regarding your index number compilation

B. Wholesale Prices (i.e. resale price of goods to business units, institutions and government without any furhter processing)

1. Has your country compiled any index number at wholesale prices?

yes ☐ no ☐

2. If the answer in question 1 above is "YES", please state the sector/field in which the index was compiled, e.g. agriculture, manufacturing, construction, import and export or general index etc. _____

3. What is the official title of the index _____

4. State the frequency at which you compile your index:-
   (a) annually ☐ (b) semi annually ☐
   (c) quarterly ☐ (d) monthly ☐
   (e) other ☐ _____

5. State the scope and coverage of the index, i.e. if the index:-
   (a) is of national coverage ☐
   (b) covers certain sections/localities of the country ☐
   (c) relates to a particular city/town or cities/towns ☐
   (d) other ☐ _____

6. What is the method used in selecting localities, towns or cities in question 5 above, if applicable? _____

7. What agency or government department is responsible for the collection of the data?_____

_____

State the number possibly the structure and qualifications of staff involved in the price statistics sectio of your agency or department (if different from section A question 6); make special mention of the field arrangements you may have for the collection of price data.

_____

_____

_____

_____

_____

_____

8. What are the sources from which you collect your information:-

(a) wholesalers ☐ (b) marketing boards ☐

(c) cooperatives ☐ (d) sales representatives ☐

(e) other ☐ _____

_____

_____

State the number of these establishments from which information is collected_____

9. What is the method used in selecting the establishments under question 7?

(a) random ☐ (b) purposive ☐

(c) other ☐ _____

_____

_____

_____

10. What is the method of price collection:-

(a) mail questionnaire ☐

(b) direct personal interview ☐

(c) other ☐ _____

_____

11. (a) What is the base period of the index and state how the base prices are determined?

(b) Were there any revisions of the weight base prior to the present?

12. State the main groups and against each group the total number of items or commodities on which the index is calculated.

13. Describe the method you use in pricing seasonal items and how such items are included in the index.

14. (a) What criterion do you use of selecting a commodity; i.e. by its end-use, function, quality, its importance in the consumption pattern, in order to include it in the index?

(b) What descriptions do you use in defining a product e.g. by size, weight etc?

(c) What procdure do you follow when items of a given type/quality cease to be produced?

15. Please state the formula(e) you use in calculating the index.

16. (a) State the type of weights used in the calculation of the index and indicate the source of data from which these weights were derived?

(b) Outline steps or method followed in which individual quotations are combined into average prices or price relatives for each locality (refer to question5) and by which average prices, price relatives or indices for each locality are combined into an index for the country as a whole.

17. What is the publication(s) in which the index number is regularly published?

In the case where a detailed methodological analysis regarding the index has been published, please send us an extract or a copy.

18. Please provide any other information omitted that will be of some help regarding your index number compilation.

C. Retail Prices (i.e. resale price of goods for personal or household consumption without any further processing)

1. Has your country compiled any indices at retail prices?
yes ☐ no ☐

2. If the answer in question 1 above is "yes" state whether it is an index on:
(a) food only ☐ ( ) all items including rent ☐
(b) other items only ☐ (c) all items excluding rent ☐
(e) other ☐

3. What is the official title of the index

4. State the frequency at which you compile your index:
(a) annually ☐ (b) semi-annually ☐
(c) quarterly ☐ (d) monthly ☐
(e) other ☐

5. *State the scope and coverage of the index, i.e. if the index:

(a) is of national coverage _____ ☐

_____

_____

(b) covers certain sections/localities of the country ☐

_____

_____

(c) relates to a particular city/cities or town/towns ☐

_____

_____

(d) other ☐

_____

_____

6. What agency or government department is responsible for the collection of the data _____

_____

State the number possibly the structure and qualifications of staff involved in the price statistics section of your agency or department (if different from section A question 6); make special mention of the field arrangements you may have for the collection of price data.

_____

_____

_____

_____

_____

_____

*Note: In each case indicate the section of the population covered by the index.

7. What is the method used in selecting localities, towns, cities in question 5 above, if applicable?

8. What are the sources from which you collect your information? In each case state the number of establishments or sales outlets.

9. What is the method used in selecting the units under question 7.
(a) random ☐ (b) purposive ☐
(c) other ☐

10. What is the method of price collection and the frequency of collection:
(a) mail questionnaire ☐
(b) direct personal interview ☐
(c) direct purchasing from establishments etc. ☐
(d) Other ☐

11. (a) What is the base period of the index? Also state how the base prices are determined.

(b) Were there any revisions of the weight base prior to the present?

12. Please state the main groups and against each group the total number of items or commodities on which the index is calculated.

13. Describe the method used in pricing seasonal items and how such items are included in the index.

14. (a) What criterion do you use of selecting a commodity i.e. by its end-use, its function, quality, its importance in the consumption pattern, in order to include it in the index?

(b) What descriptions do you use in defining a product e.g. by size, weight etc.

(c) what procedure do you follow when items of a given type/quality disappear from the market?

_____

_____

_____

_____

15. Please state the formula(e) you use in calculating the index.

_____

_____

_____

16. (a) State the type of weights used in the calculation of the index and indicate the source of data from which these weights were derived?

_____

_____

_____

(b) Outline steps or method followed in which individual quotations are combined into average prices or price relatives for each locality (refer to question 5) and by which average prices, price relatives or indices for individual localities are combined into an index for the country as a whole_____

_____

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17. What is the publication(s) in which the index number is regularly published?_____

_____

_____

In the case where a detailed methodological analysis regarding the index has been published please send us an e tract or a copy.

18. Please provide any other information omitted that will be of some help regarding your index number compilation._____

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Introduction

1. A system of national accounts at constant prices is used to trace back to the prices of a reference year, called the base year, all the economic flows of another year, called the current year. This necessitates applying a price index to each operation and transactor so that variations in one item between the two years under consideration may be reflected in a "quantity" variation and a "price" variation. To do this there must be a complete system of price statistics which can fit totally within the framework of national accounts. The system of national accounts (SNA)[1/] is well suited to this since one of its purposes is to serve as a framework for integrating economic statistics.

2. The purpose of this document is to illustrate the use of price statistics in national accounts to calculate aggregates at constant prices. The first part deals with the basic data that must be collected on prices and corresponding indexes to establish the SNA tables at constant prices. The second part is devoted to consideration of the sectoral price deflator coefficients utilized by ECA in its national accounting work for most African countries which have not undertaken estimates at constant prices.

I. PRICE STATISTICS IN THE SNA

A. Overview of the price system

3. What is currently known as "accounting at constant prices" does not cover the entire SNA. It is limited to operations concerning commodities and operations that can be directly related to them. The monetary value of these transactions may be broken down, without creating any misunderstanding into the quantity element and the price element with units of measurement peculiar to them, whereas this is not true of the other operations. This monetary value synthesizes two separate realities, on the one hand, the number of physical units of the commodity exchanged during the transaction and, on the other, the price of each physical unit of the commodity, that is to say the value for which a unit of the same commodity may be exchanged.

4. Referring to SNA table 2.17 "A Symbolic representation of the system", the commodity flows relate to rows 3 to 11 and 24 and to columns 3 to 10, 14 to 19 and 24. (See Annex I). But in view of the problems and the inconsiderable involved in the difficulties collection of price statistics on sub-matrices, even just for the base year, and the urgency of collecting them, only tables 8 to 16 in annex 8.3 of A System of National Accounts need be prepared (See Annex II).

5. These tables relate to the flows which are the elements of the supply (production-import) and disposition of commodities (intermediate consumption, final consumption, gross fixed capital formation, increase in stocks and exports). They also relate to the elements of production and intermediate consumption by producers (industries, producers of government services and producers of private non-profit services). These flows may be presented either in a general commodity account or details can be given in an input-output table which has the advantage of showing the balance between the supply and disposition of each commodity at constant prices.

1/ A system of National Accounts (United Nations publication, Sales No. E.69.XVII.3).

6. Price statistics and the corresponding indices relating to these main flows viewed within the system therefore relate both to the source of the production commodity and industry) and to the disposition of the production (intermediate and final uses).

B. Unit of observation and classification for collecting price statistics

7. The unit of observation and classification for collecting price statistics is the "goods and services" or "commodity". All real data concerning prices will relate to commodities for it is impossible to study the price of a production activity. The index numbers calculated for industries relate to data about the characteristic commodities of each industry. In order to keep track of input-output relationships each piece of information collected must relate either to a commodity (goods and services), or to a sector of production (industry) or to a user (purchasing branch, final use). The recommended classifications are as follows:

- for commodities: the International Standard Classification of All Goods and Services (ICGS)
- for industries: the International Standard Industrial Classification of All Economic Activities (ISIC).
- for final uses: the classifications proposed in the SNA in tables 5.3, 5.4, 6.1 and 6.3.

C. Valuation of the various prices

8. The SNA provides for the recording of flows both at market prices and at approximate basic value. Market prices may be either those paid by the purchaser or those received by the seller; the difference is, of course, the trade margin and transport cost. Approximate basic values differ from market prices in that they exclude net indirect commodity taxes. Data regarding prices and indexes are based on either or both valuation methods. Thus the source of production is valued at the producer's value and at the approximate basic value, while the disposition of production is valued at the purchaser's value.

D. Index number used within the system

9. Once the price data are organized within the framework of a standard classification the index number for any set or transactions or economic agents can be estimated. The system has index numbers for prices relating to the main flows of the commodity account or of the input-output table.

10. Preparing these index numbers naturally implies choosing formulae for the index numbers and for the base period to be utilized. We will mention only the following two points:

(a) It is suggested that the Paasche formula be used for index numbers on prices. By dividing the current value indexes by the price indexes one obtains the implicit quantity index on Laspeyres' formula. There are a a number of advantages to using the Laspeyres' quantity index for statistics at constant prices:

- it is possible to make a direct comparison between values from one year to another;

- it is possible to aggregate these index numbers successively. Calculating the Laspeyres index numbers for prices and obtaining the implicit Paasch quantity index may lead to a certain lack of agreement, however, it is often minimal and can be tolerated 1/;

(b) It is important to choose a base period during which conditions are relatively normal and one not too distant from the current year, not only because commodity prices are liable to change with time but because the composition of flows also changes.

11. To prepare national accounts at constant prices it is necessary to determine a system of price statistics and index number for all flows. Table 1 outlines the structure of this system of price statistics and the elements needed in national accounts. There will be an appropriate price index for each aggregate that needs to be deflated. This is simple in theory but not in practice as will be seen from the second part of the document. The main reasons are as follows:

- there is insufficient data on prices,
- existing series are not suitable for national accounts since they are designed for other uses.

II. DEVELOPMENT OF SECTORAL DEFLATORS FOR CALCULATING NATIONAL ACCOUNTS AGGREGATES AT CONSTANT PRICES

12. In this part we will deal with the sectoral price deflator coefficients for national accounts which ECA has utilized. We will begin by presenting available data concerning price statistics, then continue with a brief survey on gross domestic product deflators by industry and deflators for the outlays charged to the gross domestic product. The last point will deal with a critical analysis of these deflators and possible ways of improving them.

A. Available price statistics

13. The data on price statistics available at the ECA secretariat come from national and international publications. They are principally:

1. Consumer price indexes. The vast majority of African countries collect consumer prices fairly regularly and prepare indices but the scope of these varies considerably from one country to another.

   (a) So far as geographical scope is concerned, consumer price indexes may:

   - cover the entire nation and distinguish between urban and rural sectors;
   - cover only urban centres;
   - cover only the capital (this is the usual case in African countries)

   (b) As for population categories the consumer price indexes relate to:

   - African households or foreign households or both;
   - low-income households or middle-income households.

1/ See in this connexion : System of National Accounts, Annex to chapter IV (United Nations publication, Sales No. E.69.XVII.3).

2. Producers' price indexes: Although producers' prices have an important place in the system of price statistics and are useful for many economic analyses, few countries as yet have collected these statistics and calculated the producers' price indexes. The scope of the index varies greatly from one country to another:

   (a) from the geographical standpoint, the index generally covers the entire country;

   (b) so far as classification is concerned two methods are used, namely, the classification by commodity and by major branch of activity (agriculture, mining, manufacturing, electricity and water).

3. Wholesale price index: A limited number of African countries have drawn up a general wholesale price index. In addition to the classification by commodity and branch of activity a few countries use classification by economic source (distinguishing between locally produced and imported goods) and classification by disposition (distinguishing between intermediate consumption, final consumption, gross capital formation and export) in preparing their wholesale price index. These indexes may cover the entire country or just the capital.

4. Foreign trade price indexes: All but a few African countries now periodically collect statistics on foreign trade. The price index and the index of the unit value of imported and exported commodities apply to the entire country since the data are obtained from customs declarations. Some countries make adjustments when commodity coverage is incomplete.

5. Price indexes for producers of government services: A number of countries have drawn up specific indexes to calculate the real production of government services or their value added. These include:

   - Indexes of profits from government services;
   - indexes of fictitious prices for the nation's current purchases,
   - special indexes for the salaries and wages of Government employees;
   - indexes of average civil service salaries.

14. An analysis of this list reveals that:

   (a) Available price indexes lack homogeneity, since the basis of the claculations varies widely from one country to another and at different times within the same country;

   (b) The most common data are those of the consumer price indexes and the foreign trade index;

   (c) Very few countries have wholesale price indexes, producers' price indexes and indexes for very specific uses.

According, ECA must find other alternative price indicators in order to offset the shortage of data.

B. **GDP Deflators**

15. The sectoral price deflator coefficients used for the period 1970-1977 are given in tables 2 and 3. With these it is possible to prepare gross domestic product (GDP) tables at constant prices:

(a) According to branch of activity (table 2): (i) Agriculture; (ii) mining, (iii) manufacturing and electricity, (iv) construction, (v) trade and transport and (vi) services;

(b) According to category of outlay (table 3): (i) private consumption, (ii) government consumption, (iii) gross capital formation, (iv) commodities exported (v) less commodities imported.

16. It should be pointed out that the number of sectors for which deflators have been selected is kept to a bare minimum due to the shortage of price data. Moreover, it should also be pointed out that our proposition is based on the assumption that changes in the series considered will be in line with charges in any other series related to it.

C. Critical analysis of deflators and possible ways of improving them

17. It is clear that there are a number of drawbacks to using these deflator coefficients. We will now consider them.

1. Agricultural GDP deflator. Because of the shortage of data on producers' and wholesale prices in the agricultural sector, ECA has utilized:

(a) the index of the unit value of agricultural exports
(b) the consumer foodstuff price index

Neither index is satisfactory since:

- the former does not take into account changes in food prices which do not greatly influence export trade but have a great influence on domestic consumption;
- the latter, which reflects changes in food prices in the capital, is likely to inflate prices of agricultural commodities in the country as a whole.

In view of the importance of the agricultural sector in African economies great priority must be given to collecting data on producers' prices or wholesale prices of agricultural commodities.[1/]

2. Manufacturing sector GDI deflator: Owing to insufficient data the index of the unit value of imports is used as a deflator. This indicator is the least appropriate because of:

- the great difference in the make-up of locally manufactured and imported goods;
- the structure of costs and price movements. Moreover, the index of the unit value of imports is normally calculated on the c.i.f. value of imports which does not include import duties and charges.

1/ See the document entitled "Agricultural producer prices" (E/CN.14/NAC/67).

The best solution would be to collect statistics on producers' prices or those on wholesale prices of locally manufactured goods on a nation wide basis.

3. Consumer price indexes: This index is used to deflate a large number of national accounts aggregates such as the value added of the trade, transport and service sectors and also private and public consumption outlays (see tables 2 and 3).

It is not satisfactory for in most African countries this index refers only to the capital and, in some cases, to only one category of the population and does not cover the entire national.

When this index seems to show too sharp a price increase an average weighted index is calculated from the agricultural GDP deflator index, the consumer price index and the index for the unit value of imports.

Appropriate price indexes should be found for these various sectors, for example, an element of the indexes of existing prices or specially constructed price indexes as indicated below:

Trade:	General index or elements of wholsale and retail price indexes;
Transport and Communications	Element of the consumer price index or specially constructed price indexes, for example, the passenger/mile price index, national or international freight rates;
Government	Index of wages and salaries of government employees both civilian and military;
Public consumption	Index of wages and salaries of government employees, civilian and military, combined with specially prepared price indexes for commodities bought.

4. Index of the unit value of exports and imports

(a) The index of the unit value of goods and services exported and imported is used to deflate exports and imports of goods and services. This presupposes that changes in the prices of the goods and services considered are sufficiently interrelated or that the service element is small enough to be ignored.

These assumptions may not apply to exports and imports to transport, direct purchases by persons resident abroad or by non residents in the country under consideration and to other elements. In any event, it will be necessary to prepare price indexes weighted on the current period in order to adjust the series of current values. For example, in the case of transport services, one must use weighted averages of freight rates for given types of marchandise and routes. In the case of expenditures by persons resident abroad it is possible to use price indexes calculated on the basis of weighted variations in exchange rates and appropriate consumer price indexes in the countries with the largest numbers of such resident.

(b) Still another problem is the rather long time-lag (one or two years) before one can obtain national data on trade by commodity on which to calculate these indexes. The following solution has been adopted; it seems to be the best until such time as national data become available:

(i) For African countries whose exports consist mainly of one or more commodities such as coffee, cocoa, cotton, crude petroleum, copper, iron, phosphate, etc, world export indexes calculated and published by the United Nations Statistical Office have been taken as the basis for projecting series or indexes of the unit value of exports of each nation.

(ii) The average unit value of exports of manufactured goods has been calculated for six industrialized countries (United States of America, France, Federal Republic of Germany, Italy, United Kingdom and Japan) so as to project series of indexes of the national unit value of exports.

18. In view of these remarks and the sources of data on price statistics of African countries, it is clear that the deflators given in tables 2 and 3 are temporary and will be improved as additional data become available.

III. CONCLUSION

19. The preparation of these sectoral price deflator coefficients has illustrated the existing inadequacies of price statistics in African countries. It is essential to improve existing data and the collection of new data under the SNA system[1] in order to estimate national accounts elements at constnat prices so that they may become an effective tool in economic analysis and planning.

1/ Guidelines on Principles of a System of Price and Quantity Statistics (United Nations Publication, Sales No. E.77. XVII.9).

Table . Structure of the price statistics system

I. Source of production (producers' values and approximate base values)		
	PRODUCTION	
	Commodity	Industry
1. Agriculture, hunting, forestry and fishing		
2. Mining and quarrying	Basic data and indexes prepared at several levels of synthesis on the lines of ICGS	Indexes prepared at several levels of synthesis of ISIC
3. Manufacturing		
4. Electricity, gas and water		
5. Construction		
6. Trade, restaurants and hotels		
7. Transports, storage and communications		
8. Financing, insurance etc.		
9. Services		

II. Dispostion of production (Purchasers' values)	
1. Intermediate consumption by commodity and industry	Basic data and indexes prepared at several levels of synthesis along the lines of ICGS, ISIC and SNA
2. Final household consumption by commodity, type of outlay and purpose	
3. Final government consumption by commodity and purpose	
4. Final consumption of private non-profit institutions by commodity and purpose	
5. Gross fixed capital formation by type of capital goods and industry	
6. Increases in stock by commodity and industry holding them	
7. Exports by commodity	
8. Minus imports by commodity.	

Table 2. Deflator coefficients by branch of activity

Branch of activity	ECA deflator
1. Agriculture	Either (1) the index of the unit value of agricultural exports or (2) the consumer foodstuff price index Note (1) The index of the unit value of exports correctly prepared and excluding mineral exports, could be used in some cases as rough indicator.
2. Mining and quarrying	Price index based on the country's main exports. A distinction should be drawn between the following: (1) Petroleum-exporting countries: the index will be based on the prices of crude petroleum posted in the United Nations Statistical Yearbook. (2) Copper-exporting countries: the index is the average of copper price indexes in the United Kingdom and the United States of America; (3) Iron-exporting countries: the index is the average of the Swedish and US price indexes for iron ore
3. Manufacturing and Electricity	Index of the unit value of imports excluding imports of crude petroleum and cereals
4. Construction	Simple arithmetic mean of deflator coefficients for prices of manufactured goods and of the consumer price index
5. Trade and transport	Consumer price index
6. Miscellaneous services (including public services).	Consumer price index

Table 3: Deflator coefficients by type of outlay

Type of outlay	ECA deflator
1. Private consumption	Consumer price index
2. Government consumption	Consumer price index
3. Gross capital formation	Either (1) index of the unit value of imports in section 7 of SITC (machines and transport equipment of the importing country or (2) a simple arithmetic average of the indexes of the unit value of exports in section 7 of SITC, for the main developed exporting countries (Federal Republic of Germany, Japan, France, United Kingdom, Italy, United States of America).
4. Commodity exports	Index of unit value of exports
5. Less commodity imports	Index of unit value of imports

Annex I. Commodity flows in general framework of SNA

Table 1. Flows of goods and services in the SNA general framework

				Commodities		Activities			Final consumption			Institutional sector of receipt	Increase in stocks		Fixed capital formation			Exports
				Basic value	Commodity taxes net	Industries	Producers of government services	Producers of private n.p. services and domestic services	Household goods and services	Government purposes	Purposes of private n.p. bodies		Industries	Producers of government services	Industries	Producers of government services	Producers of private n.p. services	
				3	4	5	6	7	8	9	10	14	15	16	17	18	19	24
Production	Commodities	Commodities, basic value	3			$T_{3.5}$	$T_{3.6}$	$T_{3.7}$	$T_{3.8}$				$T_{3.15}$	$T_{3.16}$	$T_{3.17}$	$T_{3.18}$	$T_{3.19}$	$T_{3.24}$
		Commodity taxes, net	4			$T_{4.5}$	$T_{4.6}$	$T_{4.7}$	$T_{4.8}$				$T_{4.15}$		$T_{4.17}$	$T_{4.18}$	$T_{4.19}$	$T_{4.24}$
	Activities	Industries	5	$T_{5.3}$	$T_{5.4}$													
		Producers of government services	6	$T_{6.3}$					$T_{6.8}$	$T_{6.9}$								
		Private services: domestic service and producers of private n.p. services	7	$T_{7.3}$					$T_{7.8}$		$T_{7.10}$							
Consumption expenditure	Household goods and services		8									$T_{8.14}$						$T_{8.24}$
	Government purposes		9									$T_{9.14}$						
	Purposes of private n.p. bodies		10									$T_{10.14}$						
Value added			11	$T_{11.3}$	$T_{11.4}$	$T_{11.5}$	$T_{11.6}$	$T_{11.7}$										
Imports			24	$T_{24.3}$			$T_{24.6}$		$T_{24.8}$									

Table 2. Summary of contents of submatrices

Submatrices	Contents
$T_{3.5}$	The inputs of commodities, reckoned at basic values, into the productive activity of industries.
$T_{3.6}$	The inputs of commodities, reckoned at basic values, into the productive activity of the producers of government services.
$T_{3.7}$	The inputs of commodities, reckoned at basic values, into the productive activity of producers of private non-profit services to households. It is generally assumed that these inputs do not arise in the case of domestic services rendered on an individual basis (row and column 20 of table 2.1).
$T_{3.8}$	Commodities, reckoned at basic values, entering into the consumption expenditure in the domestic market of all households, whether resident or not.
$T_{3.15}$	Additions to the stocks of commodities reckoned at basic values, held by industries.
$T_{3.16}$	Additions to the stocks of commodities, reckoned at basic values, held by the producers of government services.
$T_{3.17}$	Commodities, reckoned at basic values, entering into the gross fixed capital formation of industries.
$T_{3.18}$	Commodities, reckoned at basic values, entering into the gross fixed capital formation of the producers of government services.
$T_{3.19}$	Commodities, reckoned at basic values, entering into the gross fixed capital formation of the producers of private non-profit services to households.
$T_{3.24}$	Exports of commodities reckoned at basic values.
$T_{4.5}$	Commodity taxes, net, on the commodity inputs into the productive activity of industries. The sum $T_{3.5} + T_{4.5}$ represents these commodity inputs reckoned at producers' values.
$T_{4.6}$	Commodity taxes, net, on the commodity inputs into the productive activity of producers of government services.
$T_{4.7}$	Commodity taxes, net, on the commodity inputs of producers of private non-profit services to households.
$T_{4.8}$	Commodity taxes, net, on commodities entering into household consumption expenditure in the domestic market.
$T_{4.15}$	Commodity taxes, net, on the commodities entering into the stocks of industries.
$T_{4.17}$	Commodity taxes, net, on commodities entering into the gross fixed capital formation of industries.
$T_{4.18}$	Commodity taxes, net, on the commodities entering into the capital formation of producers of government services.
$T_{4.19}$	Commodity taxes, net, on the commodities entering into the capital formation of producers of private non-profit services to households.
$T_{4.24}$	Commodity taxes, net, on exports of commodities.
$T_{5.3}$	Commodity outputs, reckoned at basic values, of industries.
$T_{5.4}$	Commodity taxes, net, on the outputs of industries. The sum $T_{5.3} + T_{5.4}$ represents the commodity outputs of industries reckoned at producers' values.
$T_{6.3}$	Commodity outputs, reckoned at basic values, of the producers of government services.
$T_{6.8}$	Government services entering into household consumption expenditure in the domestic market.
$T_{6.9}$	Services produced for own use by government services.

Table 2. Summary of contents of submatrices (cont'd)

Sub-matrices	Contents
$T_{7.3}$	Commodity outputs, reckoned at basic values, of producers of private non-profit services to households.
$T_{7.8}$	Domestic services and private non-profit services entering into household consumption expenditure in the domestic market.
$T_{7.10}$	Services produced for own use by private non-profit services.
$T_{8.14}$	Final consumption expenditure on goods and services in the domestic market by resident households.
$T_{8.24}$	Final consumption expenditure on goods and services in the domestic market by non-resident households.
$T_{9.14}$	Final consumption expenditure by general government.
$T_{10.14}$	Final consumption expenditure by private non-profit institutions.
$T_{11.3}$	Protective import duties.
$T_{11.4}$	Other import duties. In the standard accounts and tables of Chapter VIII, this entery includes all import duties and $T_{11.3}$ is suppressed.
$T_{11.5}$	Values added, that is compensations of employees, operating surpluses, provisions for the consumption of fixed capital and indirect taxes, net, in the productive activity of industries.
$T_{11.6}$	Values added in the productive activity of the producers of government services.
$T_{11.7}$	Value added in the productive activity of domestic services and the producers of private non-profit services to households.
$T_{11.23}$	The negative of charges for the consumption of fixed capital.
$T_{12.11}$	Compensation of employees and operating surpluses classified by institutional sectors of origin.
$T_{24.3}$	Imports of commodities reckoned at c.i.f. values.
$T_{24.6}$	Direct expenditure abroad on goods and services by the producers of government services.
$T_{24.8}$	Final consumption expenditure abroad by resident households.

Annex II. SNA Tables at Constant Prices

Table 8. Constant-price value and price indexes of the gross domestic product, by type of expenditure

a. Value in Constant Prices

Item	Flow		
1.	2.2.20	Government final consumption expenditure	
2.	2.2.30	Private final consumption expenditure	
3.	4.2.5	Increase in stocks	
4.	4.2.6	Gross fixed capital formation	
5.		Final consumption and gross capital formation	
6.	1.2.10	Exports of goods and services	
7.	1.1.10	Less imports of goods and services	
8.	1.3.0	Gross domestic product at purchasers' values	

b. Correlative Price Index Numbers

Item	Flow		
9.	2.2.20	Government final consumption expenditure	
10.	2.2.30	Private final consumption expenditure	
11.	4.2.6	Gross fixed capital formation	
12.		Final consumption and gross capital formation	
13.	1.2.10	Exports of goods and services	
14.	1.1.10	Imports of goods and services	
15.	1.3.0	Gross domestic product at purchasers' values	

Table 9. Gross domestic product at constant prices, by kind of economic activity

Kind of economic activity			Gross domestic product (Producers' values)	Gross domestic product (Basic values [1])
Condensed list (ISIC division and major division)	More detailed list (ISIC major group of division)	Flow	1.3.0	1.3.0-1.3.6
(1a)	(1b)		(2)	(3)
a. Industries				
1. Agriculture, hunting, forestry and fishing				
11. Agriculture and hunting	11			
12. Forestry and logging	12			
13. Fishing	130			
2. Mining and quarrying	210; 220; 230; 290			
3. Manufacturing				
31. Food, beverages and tobacco	311-312; 313; 314			
32. Textiles, wearing apparel and leather industries	321; 322; 323; 324			
33. Wood and wood products including furniture	331; 332			
34. Paper and paper products, printing and publishing	341; 342			
35. Chemicals and chemical, petroleum, coal, rubber and plastic products	351; 352; 353; 354; 355; 356			
36. Non-metallic mineral products, except petroleum and coal	361; 362; 369			
37. Basic metal industries	371; 372			
38. Fabricated metal products, machinery and equipment	381; 382; 383; 384; 385			
39. Other manufacturing industries	390			
4. Electricity, gas and water	410; 420			
5. Construction	500			
6. Wholesale and retail trade and restaurants and hotels				
61-62. Wholesale and retail trade	61-62			
63. Restaurants and hotels	631; 632			
7. Transport, storage and communication				
71. Transport and storage	71			
72. Communication	720			
8. Finance, insurance, real estate and business services	81 and 82; 83			
9. Community, social and personal services	93; 93; 94; 951 and 952 953 and 959			
Non-allocable [2]				
Sub-total				
b. Producers of Government Services				
1. Agriculture and hunting, forestry and fishing	110; 121; 130			
4. Electricity, gas and water	Perhaps 420. Water works and supply			
7. Transport, storage and communication	71. Transport only			
9. Services				
91. Public administration and defence	910			
92. Sanitary and similar services	920			
93. Social, recreational and related community services	93-94 and perhaps 81. Financial institutions			
Non-allocable				
Sub-total				
c. Producers of Private Non-Profit Services to Households				
93-94. Social, recreational and related community services: producers of private non-profit services to households	93-94			
95. Domestic services of households	953			
d. Totals				
Total				
Import duties				
Total				

[1] Approximate or true basic values or approximate or true factor values, depending on the relative urgency of requirements and feasibilities.

[2] In addition to the sum of the entries above, the sub-total includes the negative of the intermediate consumption charged to the nominal industry in respect of imputed service charge of banks and similar financial intermediaries.

Table 10. Employment by kind of economic activity

Kind of economic activity		Average number of persons employed during year		Man-hours worked by employees
Condensed list	More detailed list	All persons	Employees	
(1a)	(1b)	(2)	(3)	(4)
a. Industries				
The categories of the condensed and detailed list are the same as the categories shown in Table 9				
Sub-total				
b. Producers of Government Services				
The categories of the condensed and detailed list are the same as the categories shown in Table 9				
Sub-total				
c. Producers of Private Non-profit Services to Households				
The categories of the condensed and detailed list are the same as the categories shown in Table 9				
d. Total				

Table 11. Supply and disposition of commodities at constant prices

Source of supply or disposition				Flow	Characteristic products of specified kind of activity of industries 1/ (basic values) 11 12 13 210 . . . 81-82	Commodity taxes net 1.3.6
Supply of commodities	Industries where produced, according to kind of activity	11. Agriculture and hunting 12. Forestry and logging 13. Fishing 210. Coal mining . . . 311-312. Food manufacturing (More detailed list of Table 2 for ISIC major divisions 2 through 5) 61-62. Wholesale and retail trade (Condensed list of Table 2 for major divisions 6 through 8 except major groups 631-632 and excluding division 81. 951. Repair services n.e.c. and and 952. laundries		1.1.1		
	Producers of government services			1.1.2		
	Producers of private non-profit services to households			1.1.3		
	Imported	Import duties		1.3.4.1		
		c.i.f. value	Competitive			
			Complementary			
Disposition of supply of commodities	Intermediate consumption, industries 2/			1.2.1		
	Intermediate consumption, producers of government services			1.2.2[a]		
	Intermediate consumption, producers of private non-profit services to households			1.2.3		
	Final consumption in the domestic market, households			2.2.4[a]		
	Increase in stocks			4.2.5		
	Gross fixed capital formation, industries			4.2.51		
	Gross fixed capital formation, producers of government services			4.2.511		
	Gross fixed capital formation, producers of private non-profit services to households			4.2.5111		
	Exports			1.2.11		

1/ Kind of activity as in the rows for the supply of commodities from industries.

2/ Includes the intermediate consumption of the nominal unit to which the imputed service charge of banks and similar financial institutions is assigned.

Table 12. Gross output and Input of Industries at constant prices

Gross output and input				Flow	Kind of activity of industries 1/				
					11	12	13	210	. . . . .
Gross output of industries			Gross output (Basic values)	1.1.1					
			Commodity taxes, net	1.3.6					
Gross input of industries	Intermediate consumption 2/	Characteristic products of specified kind of activity of industries (Basic values)	11. Agriculture and hunting 12. Forestry and logging 13. Fishing 210. Coal mining . . 311-312. Food manufacturing (More detailed list of Table 9 for ISIC major divisions 2 through 5) 61-62. Wholesale and retail trade . . . (Condensed list of Table 9 for major divisions 6 through 9 ex pt 951-952 and excluding divisions 91) 951 and Repair services n.e.c. and 952. Laundries	1.2.1					
		Commodity taxes, net		1.3.6					
	Domestic factor incomes			1.3.1+ 1.3.2					
	Consumption of fixed capital			1.3.3					
	Indirect taxes, net			1.3.4- 1.3.5					

1/ Kind of activity as in the rows for the intermediate consumption of characteristic products of specified kind of activity of industries.

2/ Includes the intermediate consumption of the nominal industry to which the imputed service charge of banks and financial institutions is assigned.

Table 13. Government final consumption expenditure at constant prices, by purpose

Purpose of outlays	Final consumption expenditure	Inter c[illegible]
	Flow: 2.2.20	1.2.2
(1)	(2)	(3)
1. General public services		
2. Defence		
3-7. Social, recreational and related community services		
of which:		
3. Education		
4. Health		
5. Social security and welfare services		
8. Economic services		
Total[1/]		

1/ In addition to the categories listed, the total includes the outlays in respect of category 9, "other purposes", which cannot be allocated to any of the purpose categories listed above.

Table 14. Final consumption expenditure at constant prices of non-profit bodies serving households, by purpose

Purpose of outlays	Final consumption expenditure	Intermediate consumption
	Flow: 2.2.21	1.2.1
(1)	(2)	(3)
1. Research and scientific institutes		
2. Education		
3. Medical and other health services		
4. Welfare services		
5-8. Other purposes		
Total		

Table 15. Composition of final consumption expenditure of households at constant prices

a. By Type of Expenditure

Item	Flow		
1.	2.2.4*	Commodities purchased	
2.		Durable goods	
3.		Semi-durable goods	
4.		Non-durable goods	
5.		Services	
6.	2.2.4**	Other goods and services pruchased	
7.	2.2.4	Final consumption in the domestic market	
8.	2.1.12.1	Direct purchases abroad by resident households	
9.	-2.2.12.1	Less Purchases in the domestic market by non-resident households	
10.	2.2.32	Final consumption expenditure (Items 7+8-9)	

b. Final Consumption in the Domestic Market by Object

Object		
Condensed list	More detailed list	
(1a)	(1b)	
1. Food, beverages and tobacco	1.1; 1.2; 1.3; 1.4	
2. Clothing and footwear	2.1; 2.2	
3. Gross rent, fuel and power	3.1; 3.2	
4. Furniture, furnishings and household equipment and operation	4.1; 4.2; 4.3; 4.4; 4.5 and 4.6	
5. Medical care and health expenses	5.1; 5.2; 5.3; 5.4 and 5.5	
6. Transport and communication	6.1; 6.2; 6.3; 6.4	
7. Recreation, entertainment, education and cultural services	7.1; 7.2; 7.3; 7.4	
8. Other goods and services	8.1; 8.2; 8.3; 8.4; 8.5 and 8.6	
Final consumption in the domestic market (Flow 2.2.4)		

Table 16. Composition of gross domestic capital formation at constant prices

a. By Type of Capital Goods	
1. Residential building 2+3. Non-residential building and other construction except land improvement 5. Transport equipment 6. Machinery and equipment 4+7. Land improvement and plantation and orchard development and breeding stock, draught animals, etc.	
Grosss fixed capital formation (Flow 4.2.6)	
1. Goods producing industries 1.1 Materials and supplies 1.2 Work-in-progress 1.3 Livestock except breeding stock, dairy cattle and the like 1.4 Finished goods 2. Wholesale and retail trade 3. Other industries 4. Government services	
Increase in stocks (Flow 4.2.5)	
Gross capital formation (Flows 4.2.6 + 4.2.5)	

b. By Kind of Economic Activity

Kind of economic activity		Gross fixed capital formation
Condensed list (ISIC divisions and major divisions)	More detailed list (ISIC major groups and divisions)	Flow 4.2.6
(1a)	(1b)	(2)
a. Industries		
1. Agriculture, hunting, forestry and fishing	11; 12; 13	
2. Mining and quarrying	210; 220; 230; 290	
3. Manufacturing		
31. Food, beverages and tobacco	311-312; 313; 314	
32. Textiles, wearing apparel and leather industries	321; 322; 323; 324	
33. Wood and wood products, including furniture	331; 332	

Table 16. Composition of gross domestic capital formation at constant prices (cont'd)

b. (Cont'd). By Kind of Economic Activity

Kind of economic activity		Gross fixed capital formation
Condensed list (ISIC divisions and major divisions)	More detailed list (ISIC major groups and divisions)	
	Flow	4.2.6
(1a)	(1b)	(2)
34. Paper and paper products, printing and publishing	341; 342	
35. Chemicals and chemical, petroleum, coal, rubber and plastic products	351; 352; 353; 354; 355; 356	
36. Non-metallic mineral products, except petroleum and coal	361, 362, 369	
37. Basic metal industries	371; 372	
38. Fabricated metal products, machinery and equipment	381; 382; 383; 384; 385	
39. Other manufacturing industries	390	
4. Electricity, gas and water		
41. Electricity, gas and steam	410	
42. Water works and supply	420	
5. Construction	500	
6. Wholesale and retail trade and restaurants and hotels	61-62, 63	
7. Transport, storage and communication		
71. Transport and storage	711; 712; 713; 719	
72. Communication	720	
8. Finance, insurance, real estate and business services	81 and 82; 83	
9. Community, social and personal services	92, 93 and 94; 95	
Sub-total		

Table 16. Composition of gross domestic capital formation at constant prices (cont'd)

Kind of Economic activity		
Condensed list (ISIC divisions and major divisions)	More detailed list (ISIC major groups and divisions	Gross fixed capital formation
	Flow	4.2.6
(1a)	(1b)	(2)
b. Producers of Government Services		
1. Agriculture, hunting, forestry and fishing	1	
4. Electricity, gas and water	Perhaps 420. Water works and supply	
7. Transport, storage and communication	71. Transport only	
8-9. Services		
91. Public administration and defence	91	
92. Sanitary and similar services	92	
93-94 and Social, recreational and related community services	93 and 94; perhaps 81. Financial institutions	
Sub-total		
c. Producers of Private Non-Profit Services to Households		
93-94. Social, recreational and related community services	93 and 94	
d. Total		